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DAM SAFETY PROGRAM
TECHNICAL HISTORY
BIBLIOGRAPHY

Report No 86-174-K

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ABSTRACT

As a part of the Dam Safety Program a bibliographic listing of existing information within the Concrete Technology Section and Central Records has been compiled and included in this report. This covers nine hydraulic structures on the St. Lawrence and Madawaska River systems. No attempt is made to interpret the information or assess its relevance.

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To Mr. J.V. Doyle
Manager, Civil Works
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Attn: Mr. O. Bernaus

DAM SAFETY PROGRAM
TECHNICAL HISTORY - BIBLIOGRAPHY

E. McColm and P.K. Mukherjee

1.0 INTRODUCTION

The purpose of the Dam Safety Program is to meet Ontario Hydro's responsibility in the area of public and employee safety relating to the operation of dams and reliable hydraulic energy production/1/. One of the aspects of this program is the documentation of the technical history for each hydraulic structure using all relevant information on the design, construction and operation. As part of the Technical History documentation this report presents a bibliography of reports and files stored with the Concrete Technology Section, Civil Research Department and Central Records. Structures on the St. Lawrence and Madawaska River systems are covered in this report. Tables listing the location of information are attached in the appendices (A to I).

2.0 DESCRIPTION

Records of nine structures on the St. Lawrence and Madawaska River systems were investigated. For each structure, tables cataloging the available information have been compiled. The tables themselves were prepared under four headings following the format set by the Civil Works Department. These headings are:

Item 2.3 - Design Assumptions and Criteria;
Item 2.4 - Construction Plans and Specifications;
Item 2.5 - Correspondence Files;
Item 3.8 - Inspection Testing and Investigation Reports (during operation).

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1. "Ontario Hydro, Dam Safety Program", Civil Works Department, Thermal and Hydraulic Generation Division, October, 1985.

The tables are further broken down into three sections consisting of:

- Title of Document
- Nature of Document and Date
- Location of Document

The "Title of Document" contains the titles of reports, memoranda and the headings of files.

The "Nature of Document" section is divided into two subheadings titled "Code" and "Text". The "Text" gives a brief description of the contents of the document. The "Code" identifies the type of document using the following abbreviations:

Rept - report
Memo - memorandum
Genl - general file
Corr - correspondence
Data - "raw" data or test results
Insp - inspectors report
Phot - photographs
Spec - specifications
Dwrg - drawing

The "Date" for data and correspondence files records when the material was produced. For reports the date of issue is listed.

The "Location" section indicates where the document is stored and is divided into three subheadings titled "Archives No", "Report No" and "File No". The bin numbers for files stored with Central Records, Kipling Complex, are placed under "Archives No". This material originated with the Concrete Technology Section and has been transferred to the Central Records for long-term storage. Requests for files stored under "Archives No." should be made to Central Records, KD170. The "Report No." represents the research report number issued by the Research Division. To obtain a copy of research reports, requests should be made to the Kipling Research Division, General Office at KR107.

Files within the Concrete Technology Section are placed under "File No". This material is essentially work files and is for internal use of the Concrete Technology Section. The information in these files may not be related to the actual construction of the dam. These files are represented in the following manner in the tables.

P 842.SAU Project file located in the Concrete Technology Office, Civil Research Department.

L 51.6.9 Lab File located in the Concrete Laboratory, Civil Research Department.

Conc. Lab Item stored in the Concrete Laboratory, Civil Research Department.

HIST History File located with the Concrete Technology Section, Civil Research Department.

3.0 SUMMARY OF LOCATION OF DOCUMENTS

3.1 R.H. Saunders GS

A large number of files and reports are available on this station (Appendix A). The inspectors reports and the general files are stored in the Central Records. The Concrete Laboratory retains work files dealing with material testing associated with research investigations for this project.

3.2 Iroquois Dam

The only information on this structure is two monthly progress reports issued by the American firm that was involved in the construction of this dam (Appendix B).

3.3 Arnprior GS

This station was constructed fairly recently by Acres Consulting Services. Many of the research reports issued in connection with this station dealt with the aggregate survey. The information on the properties of the materials used for construction is contained in a final report on concrete quality control produced by Acres and stored in the project file under 842.ARN. Other than this report, there is not a great deal of information on this station (Appendix C).

3.4 Stewartville GS

Research reports were issued on the aggregate search and testing conducted during the original construction. The history file contains a detailed account of the construction with summaries of the properties of the materials used. General correspondence files are located in the Central Records. The concrete inspectors daily reports could not be located.

A major extension was added to this station in the 1960's. Most of the information on this work can be found in the Central Records and in research reports. The extension work coincided with the end of construction of Mountain Chute GS, the extension to Barrett Chute GS and remedial work to Calabogie GS. Information on all four of these projects is mixed together, especially in the general files (Appendix D).

3.5 Calabogie GS

This station was placed in service in 1917 and was acquired by Ontario Hydro in 1929. There is no information on the original construction of this dam. The information that is available deals mainly with the remedial work conducted in the 1960's. Much of this material is mixed in with the files from Mountain Chute GS and the extension work to Barrett Chute GS and Stewartville GS (Appendix E).

3.6 Barrett Chute GS

The History File contains a detailed report on the construction and includes a summary of the properties of the materials used. Other than this report there is very little information on the original construction of this station. A few of the general correspondence files and none of the concrete inspection reports were located.

The information on the extension to this station is stored in the Central Records and in research reports. Some material is mixed in with the files on other stations (Appendix F).

3.7 Mountain Chute GS

There is a large amount of information on this station since it was constructed fairly recently by Ontario Hydro (Appendix G). The research reports deal mainly with the aggregate survey. The concrete reports and general files are located in the Central Records. The Concrete Laboratory retained some work files on material tests associated with this project.

3.8 Kamaniskeg Lake Dam

Only three general files on this dam could be located in the Central Records. It appears that some information is missing, including general files and concrete inspectors reports (Appendix H).

3.9 Bark Lake Dam

The History File contains a detailed report on the construction and the materials used. Other than that only one general file was found in the Central Records (Appendix I). The concrete inspectors reports and most of the general files could not be located.

4.0 REMARKS

It should be noted that no attempt was made to interpret the information or assess its relevance. Many research reports were prepared on materials that were eventually not used in the construction of these projects.

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APPENDIX A

R.H. Saunders GS

The following item numbers and headings refer to the table "Format of Technical Histories" located in the Civil Works Department document "Terms of Reference for the Civil Research Department".

		Page No
Item 2.3	Design Assumptions and Criteria	7
Item 2.4	Construction Plans and Specifications	44
Item 2.5	Correspondence Files	52
Item 3.8	Inspection Testing and Investigation Reports	65

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTION AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

PERIOD: 1952-1958

PREPARED BY: E.J. McColm

REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	"Concrete Aggregate - St. Lawrence River Project Preliminary Survey Location 1-8"	Rept	Aggregate survey - locations 1-8 (preliminary survey)	08/07/52	14-7-245-5	52-501	
2	"St. Lawrence Aggregate Survey-Progress Report No. 1"	Rept	Aggregate survey - progress report #1.	28/10/53	14-7-245-5	53-536	
3	"Petrographical and Soundness Test on Core Samples from Drill Hole BC-5 in the Vicinity of the Proposed St. Lawrence Power House"	Rept	Petrographical and soundness tests on drill core samples taken from vicinity of proposed powerhouse site	18/02/54		54-77	
4	"St. Lawrence Aggregate Survey Progress Report No. 2"	Rept	Aggregate survey - progress report #2.	19/02/54	14-7-245-5	54-83	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTION AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
5	"General Remarks on Preliminary Petrographical Reports on the St Lawrence Aggregates"	Rept	Petrographical reports - general remarks.	01/03/54		M54-17	
6	"Preliminary Petrographical Results for the Concrete Aggregate from Pit No. 4 in the St. Lawrence Area"	Rept	Petrographical examination - Pit No. 4 (coarse aggregate)	01/03/54		M54-18	
7	"Preliminary Petrographical Results for the Coarse Aggregate from Pit No. 47 in the St. Lawrence Area"	Rept	Petrographical examination - Pit No. 47 (coarse aggregate)	01/03/54		M54-19	
8	"Preliminary Petrographical Results for the Coarse Aggregate from Pit No. 47 in the St. Lawrence Area"	Rept	Petrographical examination - Pit No. 47 (coarse aggregate).	01/03/54		M54-20	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTION AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
9	"Preliminary Petrographical Results for the Coarse Aggregate Pit No. 42 in the St. Lawrence Area"	Rept	Petrographical examination - Pit No. 42 (coarse aggregate).	01/03/54		M54-21	
10	"Preliminary Petrographical Results for the Coarse Aggregate from Pit No. 42 in the St. Lawrence Area"	Rept	Petrographical examination - Pit No. 42 (coarse aggregate).	01/03/54		M54-22	
11	"Preliminary Petrographical Results for the Coarse Aggregate from Pit No. 39 in the St. Lawrence Area"	Rept	Petrograhical examination - Pit No. 39 (coarse aggregate).	01/03/54		M54-23	
12	"Comparison of Rock from the Mille Roches and Cornwall Center Areas"	Rept	Aggregate survey - Comparison of rock from Mille Roches and Cornwall Center areas.	04/03/54		54-102	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
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(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
13	"Preliminary Petrographical Results for the Coarse Aggregate P-180 from the Brighton Pit"	Rept	Petrographical examination - Brighton Pit (coarse aggregate).	08/03/54		M54-25	
14	"Testing of St. Lawrence Aggregates - Progress Report"	Rept	Aggregate tests - progress report	10/03/54		CON54-100	
15	"Petrographical Examination on the Coarse Aggregate P-177 from the St. Lawrence Area"	Rept	Petrographical examination - Pit No. 66 (coarse aggregate).	11/03/54		M54-27	
16	"Preliminary Petrographical Results on the Coarse Aggregate P-178 in the St. Lawrence from Pit No. 65"	Rept	Petrographical examination - Pit No. 65 (coarse aggregate).	11/03/54		M54-28	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTION AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
17	"Petrographical Results on Coarse Aggregate from Pit No. 68 in the St. Lawrence Area"	Rept	Petrographical examination - Pit No. 68 (coarse aggregate).	22/03/54		M54-30	
18	"Petrographical Results on Coarse Aggregate from Pit No. 22 in the St. Lawrence Area"	Rept	Petrographical examination - Pit No. 22 (coarse aggregate).	23/03/54		M54-32	
19	"Preliminary Petrographic Report on the Drill Cores from the Optioned Area in Cornwall Center"	Rept	Petrographical examination - optioned area, Cornwall Center (drill cores).	25/03/54		CON54-113	
20	"Testing of St Lawrence Aggregates - Progress Report No. 2"	Rept	Aggregate tests - progress report #2	07/04/54		CON54-141	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
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STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
21	"Preliminary Petrographical Report on the Drill Cores From the Smaller Option Area in Cornwall Center"	Rept	Petrographical examination - smaller option area, Cornwall Center (drill cores).	12/04/54		54-173	
22	"Progress Report - Manufacture of Sand From the St. Lawrence Development"	Rept	Manufactured sand - progress report.	14/04/54		54-171	
23	"Petrographic Report on St. Lawrence Aggregate"	Rept	Petrographic report - manufactured sand from Miron et Freres.	26/04/54		M54-43	
24	"Summary Report on Field Investigation for Coarse Aggregate - Cornwall Area (Dec. 1953-April 1954)"	Rept	Aggregate survey - summary report.	05/54	14-7-246-48		

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RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
25	"Petrographical Results on the Coarse Aggregate From Pit No. 69"	Rept	Petrographical examination - Pit No. 69 (coarse aggregate).	06/05/54		M54-49	
26	"St. Lawrence Aggregate Survey-Progress Report No. 3"	Rept	Aggregate survey - progress report #3	12/05/54	14-7-245-5	54-220	
27	"Testing of St Lawrence Aggregates - Progress Report No. 3"	Rept	Aggregate tests - progress report #3	13/05/54		54-219	
28	"Examination of "Pop-Outs" on Structures in Cornwall Area"	Rept	"Pop-Outs" on structures in the local area.	18/05/54	14-7-245-5	K54-1	
29	"Examination of Quarries Norwood, N.Y. and Joliette, Quebec"	Rept	Examination of quarries - Norwood, N.Y. - Joliette, Quebec	18/05/54	14-7-245-5	K54-2	
30	"Test Results on St. Lawrence Aggregates Progress Report No. 4"	Rept	Aggregate tests - progress report #4	29/06/54		54-309	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
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STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
31	"St. Lawrence Aggregate Survey-Progress Report No. 4"	Rept	Aggregate survey - progress report #4	05/07/54	14-7-245-5	54-313	
32	"Petrographical Examination of Cardinal Dolomite (Anderson Property)"	Rept	Petrographical examination - Cardinal dolomite	16/07/54		M54-74	
33	"Series "A" Concrete Proportioning Tests - St. Lawrence Development"	Rept	Concrete proportioning tests - series "A"	30/07/54	14-7-246-38 14-7-253-439	M54-78	
34	"St. Lawrence Development Inspection and Sampling for Bulk Rock Samples - Cornwall Center Test Shaft"	Rept	Cornwall Center test shaft - bulk rock samples.	05/08/54			*Binder: 22-347

*Work file for internal use of Concrete Technology Section

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ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
35	"Petrographical Examination of Cornwall Center Rocks"	Rept	Petrographical examination - Cornwall Center rocks	19/08/54		M54-85	
36	"Some Factors in Choice of Quarry Sites - St. Lawrence Project"	Rept	Aggregate survey - factors in choice of quarry sites	07/09/54	14-7-246-48	54-411	
37	"Visit to Users and Producers of Manufactured Sand"	Rept	Manufactured sand - visit to users and producers	10/09/54	14-7-246-48	54-410	
38	"Petrographical Examination of Malone Sand"	Rept	Petrographical examination - Malone sand	20/09/54	14-7-246-48	M54-91	
39	"Freezing and Thawing Tests on Concrete Aggregates - St. Lawrence Development"	Rept	Aggregate tests - freeze/thaw	22/09/54	14-7-270-1367	M54-93	

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ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
40	"Effect of the Particle Shape of Fine Aggregate on Cement Requirements"	Rept	Fine aggregate - effect of particle shape on cement requirements	27/09/54	14-7-246-48	M54-95	
41	"Petrographical Examination of Gravel and Sand From Grenadier Island"	Rept	Petrographical examination - Grenadier Island sand and gravel	04/10/54	14-7-246-47	M54-98	
42	"Petrographical Examination of a Rock Sample From a Mine at Marmora, E. Ontario"	Rept	Petrographical examination - sample from Marmora Mine	13/10/54	14-7-246-47	M54-103	
43	"Petrographical Examination of a Rock Sample from Williamsburg Ont."	Rept	Petrographical examination - sample from Williamsburg Ontario	13/10/54	14-7-246-47	M54-104	
44	"Petrographical Examination of Rock Samples From Kentner Farm, W of Waddington, N.Y."	Rept	Petrographical examination - sample from Kentner Farm, Waddington, N.Y.	13/10/54	14-7-246-47	M54-105	

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ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
45	"Manufactured Sand - St. Lawrence Project Progress Report No. 2"	Rept	Manufactured sand - progress report	14/10/54	14-7-246-47	54-400	
46	"Application of Milling Techniques to the Benefication of St. Regis Sand"	Rept	Milling techniques for the benefication of St. Regis sand.	14/10/54	14-7-246-47	54-479	
47	"Comparison of the Top and Bottom 25 Foot Levels of Limestone "A" Cornwall Center Optioned Area"	Rept	Cornwall Center optioned area - comparison of top and bottom levels of limestone.	20/10/54	14-7-246-47	M54-108	
48	"Petrographical Examination of Iroquois Dolomite (Fisher and Gibson Properties)"	Rept	Petrographical examination - Iroquois dolomite from Fisher and Gibson properties.	26/10/54	14-7-246-47	M54-112	

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ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
49	"The Effect of Fine Aggregate Grading on the Workability, Water Requirements and Compressive Strength of Concrete"	Rept	Fine aggregate grading - effect on concrete workability, water requirements and compressive strength.	26/10/54	14-7-246-47	M54-111	
50	"Popping" Tendancies in Aggregate From the Cornwall Area"	Rept	"Popping" tendancies of local aggregate	15/11/54	14-7-246-47	54-532	
51	"Comparative Tests on Montreal and Belleville Cements - St. Lawrence Power Project"	Rept	Comparison of cement - Montreal and Belleville	24/11/54	14-7-246-47	M54-122	
52	"Petrographical Examination of the Dolomitic Rock From the Lambert and Mills Property, Knapp Station, N.Y."	Rept	Petrographic examination - of dolomitic rock from Lambert & Mills property Knapp Station, N.Y.	30/11/54	14-7-246-47	M54-123	

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RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
53	"Tests on St. Regis River Sand St. Lawrence Project"	Rept	St. Regis Sand - tests	01/12/54		M54-124	
54	"Petrographical Examination of the Dolomitic Rock From the Lambert and Mills Property Helena N.Y. (P-248, S-4704)"	Rept	Petrographical examination - of dolomitic rock from Lambert and Mills property, Helena, N.Y.	09/12/54		M54-126	
55	"Petrographical Examination of the Dolomitic Rock From the General Crushed Stone Co. Property, Helena, N.Y. (P-249, S-4705)"	Rept	Petrographical examination - of dolomitic rock from General Crusher Stone Co. property, Helena, N.Y.	13/12/54		M54-127	"
56	"Petrographical Examination of the Dolomitic Rock From Point Rockway N.Y. (P-250, S-4727)"	Rept	Petrographical examination - of dolomitic rock from Point Rockway, N.Y.	14/12/54		M54-129	

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STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
57	"Evaluation of Aggregates From Several U.S. Sources"	Rept	Aggregate survey - U.S. sources	21/12/54		54-577	
58	"Petrographical Examination of the Dolomitic Rock from the Barrett Property, Knapp Station, N.Y. (P-259)"	Rept	Petrographical examination - of dolomitic rock from the Barrett property, Knapp Station, N.Y.	03/01/55		M55-1	"
59	"Test Report on St. Lawrence Aggregates Progress Report No. 5"	Rept	Aggregate tests - progress report #5	07/01/55	14-7-270-1357	55-9	
60	"Petrographical Examination of the Dolomitic Rock From the Barrett Co. Quarry at Norwood, N.Y."	Rept	Petrographical examination - of dolomitic rock from the Barrett Co. quarry Norwood, N.Y.	12/01/55		M55-6	
61	"Tests on Fine Aggregates for Possible Use in Cement/Sand Grout"	Rept	Aggregate tests - fine aggregate for possible use in grout.	13/01/55		M55-7	

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ITEM 2.3 - DESIGN ASSUMPTION AND CRITERIA
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STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
62	"Comparison of Summarized Petrographical Results on Beekmantown Dolomitic Rocks From Various Location in the St. Lawrence Area"	Rept	Petrographical examination - summary of results on Beekmantown dolomitic rocks.	28/01/55		M55-11	
63	"Petrographical Examination of Crushed Gravel From Location 4, Losey Pit"	Rept	Petrographical examination - location No. 4, Losey Pit (crushed gravel)	01/02/55		M55-13	
64	"Petrographical Examination of Gravel From Brighton Pit"	Rept	Petrographical examination - Brighton pit (gravel)	07/02/55		M55-15	
65	"Petrographical Examination of a Sand Mixture From Pits No. 10 and 23 in the St. Lawrence Area"	Rept	Petrographical examination - Pit No. 10 and No. 23 (sand)	14/02/55		M55-16	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
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STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.)	FILE NO.
66	"Petrographical Examination of Limestone From the Silverstone Black Marble Quarry, St. Albert, Quebec"	Rept	Petrographical examination - Silverstone Black Marble Quarry, St. Albert, Que.	22/02/55		M55-20	
67	"The Effect of Particle Shape of Fine Aggregate on Concrete"	Rept	Fine aggregate - effect of particle shape on concrete.	09/03/55	14-7-246-45	55-106	
68	"Petrographical Investigation of Weathered Beekmantown Dolomite From the Small Fisher Quarry (P-262, S-4756)"	Rept	Petrographical examination - small Fisher quarry (Beekmantown dolomite)	14/03/55		M55-24	
69	"Composition and Particle Shape of Crusher Dust From Queenston Dolomite"	Rept	Crusher dust (Queenston dolomite) - composition and particle shape	16/03/55		M55-26	

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STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
70	"Petrographical Examination of Sheek Island Rock"	Rept	Petrographical examination - Sheek Island rock	05/04/55		M55-31	
71	"Conformity of Cornwall Center Rock With St. Lawrence Power Project Specification For Concrete Aggregates (C-98-54, Part 11B)"	Rept	Conformity of Cornwall Center rock to project specification for concrete aggregates.	12/04/55		M55-173	
72	"Report For the Joint Board-Summary of Test Results on Cornwall Center Rock"	Rept	Cornwall Center rocks - summary of test results	12/04/55		55-173	
73	"Petrographical Examination of Trap Rock From the Building Products Ltd. Quarry, Havelock, Ontario"	Rept	Petrographical examination - trap rock from Building Products Ltd. quarry, Havelock, Ontario	18/04/55		M55-35	

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ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
74	"Colour Comparison of Cornwall Center Limestone and Norfolk, N.Y. Dolomite"	Rept	Colour comparison of Cornwall Center and Norfolk, N.Y. rock.	21/04/55	14-7-246-44	M55-36	
75	"Uniformity of the Grading of Manufactured Sand Used in Thirty Batchs of Concrete Masonry - Program 92"	Rept	Manufactured sand - uniformity of grading	11/05/55		M55-41	
76	"Petrographical Examination of Crushed Gravel From Location No. 4 Losey Pit (Third Report)"	Rept	Petrographical examination - location No. 4, Losey pit (crushed gravel)	20/05/55		M55-43	
77	"Series "A" Proportioning Tests St. Lawrence Power Project"	Rept	Proportioning tests - series "A"	31/05/55		55-246	

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ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
78	"Preliminary Proportioning Tests - Masonry Research Program No 92"	Rept	Proportioning tests - preliminary tests	31/05/55	14-7-253-439	M55-45	
79	"Petrographical Examination of Trap Rock From the Bethlehem Steel Corp. Mine, Marmora, Ontario"	Rept	Petrographical examination - trap rock from Bethlehem Steel Corp Mine, Marmora, Ontario	09/06/55		M55-48	
80	"The Physical Performance of Waterstops"	Rept	Physical performance of waterstops.	14/06/55		M55-49	
81	"Petrographical Examination of the Dolomitic Rock From the Brockville Crushed Stone Ltd Quarry, Brockville, Ontario"	Rept	Petrographical examination - dolomitic rock from Brockville Crushed Stone Ltd. Quarry, Brockville, Ontario	23/06/55		M55-54	
82	"Petrographical Examination Iroquois Dolomite Samples"	Rept	Petrographical examination - Iroquois dolomite	08/07/55		M55-56	

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ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
83	"Tests on Grouting Sands For Use on St. Lawrence Power Project"	Rept	Grouting sand - tests	13/07/55		55-318	
84	"Visit to Various Quarries"	Memo	Aggregate survey - visit to quarries	20/07/55			*Binder: 27-437
85	"Petrographical Examination of the Crushed Limestone From the Frazer-Duntile Quarry at Ottawa"	Rept	Petrographical examination - crushed limestone from Frazer - Duntile Quarry, Ottawa	26/07/55		M55-59	
86	"Petrographical Examination of Crushed Gravel From Location No. 4 Losey Pit (Fourth Report)"	Rept	Petrographical examination - location No. 4 Losey Pit (crushed gravel)	28/07/55		M55-60	

*Work file for internal use of Concrete Technology Section

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STRUCTURE: R.H. Saunders G.S.

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ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
87	"Preliminary Report Tests on Long Sault Rock Cores"	Rept	Tests on Long Sault rock cores.	15/08/55		55-362	
88	"Report Summarizing Information Obtained in Tests on Waterstop for Concrete Joints"	Rept	Tests on waterstops - summary report	08/09/55		55-403	
89	"Petrographical Characteristics of Shale Specimens of Long Sault Cores, Used in the Shear and Compressive Strength Tests"	Rept	Petrographical examination - Long Sault rock cores used in testing	08/09/55		M55-65	
90	"Preliminary Proportioning Tests - St. Lawrence Power Project"	Rept	Proportioning tests - preliminary tests	08/09/55	14-7-253-439	55-405	

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STRUCTURE: R.H. Saunders G.S.

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ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
91	"Tests on Long Sault Rock Cores"	Rept	Tests on Long Sault rock cores.	09/09/55		55-408	
92	"Petrographical Examination of Snyder Sand"	Rept	Petrographical examination - Snyder sand	09/09/55		M55-66	
93	"Petrographical Examination of Crushed Gravel From Location No. 4 Losey Pit (Fifth Report)"	Rept	Petrographical examination - location No. 4, Losey Pit (crushed gravel)	14/09/55		M55-67	
94	"Freezing and Thawing Tests on Concrete Aggregates - St. Lawrence Power Project"	Rept	Aggregate tests - freeze/thaw	20/09/55		M55-69	
95	"Sand-Stone Ratio Studies St. Lawrence Power Project"	Rept	Sand/stone ratio studies	22/09/55	14-7-253-439	M55-71	

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STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
96	"Review of Methods for Determining the Water Content of Fine Aggregate"	Rept	Methods for determining the water content of fine aggregate	28/09/55		55-444	
97	"Visit to Various Quarries"	Rept	Aggregate survey - visit to quarries	30/09/55		M55-74	
98	"Petrographical Examination of Iroquois Dolomite (Former Harvey Quarry, Second Report)"	Rept	Petrographical examination - Iroquois dolomite (Harvey quarry)	06/10/55		M55-75	
99	"Petrographical Examination of Limestone From the Cote Ste Chatherine Excavations, Quebec"	Rept	Petrographical examination - limestone from the Cote Ste Chatherine excavations, Quebec	12/10/55		M55-76	
100	"Further Studies of Air Entraining Admixtures Masonry Research Program No. 93 - St. Lawrence Power Project"	Rept	Tests on air entraining admixtures	01/11/55		M55-83	

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ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
101	"Examination of the Clayey Mud From the Upper Part of the Cornwall Center Quarry and of the Dusty Coating on the Crushed Coarse Aggregate"	Rept	Cornwall Center quarry - examination of Clayey mud from the upper part of the quarry and of the dusty coating on the coarse aggregate.	15/11/55		M55-86	
102	"Proposed Pumpcrete Tests on Concrete Made With Manufactured Sand and Crushed Limestone Rock From Cornwall"	Memo	Pumpcrete test - using Cornwall aggregates	01/12/55			L51.6.9*
103	"Preliminary Tests on Job Manufactured Sand - St. Lawrence Power Project"	Rept	Manufactured sand - preliminary tests	23/12/55		M55-94	
104	"Bleeding Tests on Concrete Made With Natural and Manufactured Sand - St. Lawrence Power Project"	Rept	Bleeding test on concrete using manufactured and natural sand.	30/12/55		M55-97	

*Work file for internal use of Concrete Technology Section

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STRUCTURE: R.H. Saunders G.S.

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		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
105	"Freezing and Thawing Tests on Concrete - Comparison of Admixture - St. Lawrence Power Project"	Rept	Admixture comparison - freeze/thaw test on concrete	04/01/56		M56-1	
106	"Preliminary Mixes to Pumpcrete Experiments at Sir Adam Beck Niagara G.S. No. 2 - St. Lawrence Power Project"	Rept	Pumpcrete Tests - preliminary mixes	16/01/56	14-7-246-41	M56-5	
107	"Plastic Waterstop for the St. Lawrence Project"	Rept	Plastic waterstop	18/01/56		M56-6	
108	"Delivery Pipe Stresses During Large Scale Pumpcrete Tests for the St. Lawrence Power Project"	Rept	Pumpcrete tests - delivery pipe stresses	23/01/56		M56-34	

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ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
109	"Sand/Stone Ratio Studies St. Lawrence Power Project"	Rept	Sand/stone ratio studies	23/01/56	14-7-246-41	56-36	
110	"Tests on Air Entraining Admixtures for the St. Lawrence Power Project"	Rept	Tests on air entraining admixtures	23/01/56		56-37	
111	"Large Scale Mix Test on Mass Concrete for the St. Lawrence Power Project"	Rept	Large scale mix test on mass concrete	23/01/56	14-7-246-41	56-39	
112	"Large-Scale Pumpcrete Tests for St. Lawrence Power Project at Niagara Pumped Storage Reservoir"	Rept	Pumpcrete test	23/01/56	14-7-246-41	56-40	

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ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
113	"Concreting Studies - St. Lawrence Project Summarizing Report"	Rept	Concreting studies - summarizing report	24/01/56	14-7-253-438	56-42	
114	"St. Lawrence Power Project Powerhouse - Rock Test"	Rept	Rock test - powerhouse	25/01/56	14-7-246-41	M56-7	
115	"Freezing and Thawing Tests on Concrete Comparative Tests of Montreal and Belleville Portland Cements"	Rept	Cement comparison - freeze/thaw tests on concrete (Montreal and Belleville cements)	09/02/56		M56-12	
116	"Mineralogical Determination of Non-Carbonate Impurities in a Crusher Dust"	Rept	Crusher dust - mineralogical determination of non-carbonate impurities	15/02/56		M56-15	

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ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
117	"Petrographical Examination of Harvey Dolomite Samples Subjected to Sodium Sulphate Soundness Test"	Rept	Petrographical examination - Harvey dolomite (sodium sulphate soundness test samples)	17/02/56		M56-16	
118	"Freezing and Thawing Tests on Concrete Sand/Stone Ratio Studies - St. Lawrence Power Project"	Rept	Sand/stone ratio studies - freeze/thaw test on concrete	20/02/56		M56-17	
119	"Mineralogical Determination of Non-Carbonate Impurities in Crusher Dust (Second Report)"	Rept	Crusher dust - mineralogical determination of non-carbonate impurities	28/02/56		M56-23	
120	"Tests on Rock Cores Barnhart Island Powerhouse-Canadian Side St. Lawrence Power Project"	Rept	Rock cores from site of Barnhart Island Powerhouse - tests (Canadian side)	09/03/56		M56-32	

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STRUCTURE: R.H. Saunders G.S.

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ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
121	"Comparison of Manufactured Sand and Crusher Dust of Cornwall Center Limestone"	Rept	Manufactured sand - compared to crusher dust from Cornwall Center Limestone	15/03/56		56-116	
122	"Tests on Rock Cores Barnhart Island Powerhouse - American Side St. Lawrence Power Project"	Rept	Rock cores from site of Barnhart Island powerhouse - test (American side)	22/03/56		M56-36	
123	"Tests on Rock Cores Barnhart Island Powerhouse"	Rept	Rock cores from site of Barnhart Island powerhouse - tests	03/04/56	14-7-246-39	56-144	
124	"Petrographical Examination of Crushed Gravel From Location No. 4, Stuart Pit (Second Report)"	Rept	Petrographical examination - location No. 4, Stuart Pit (crushed gravel)	12/04/56	14-7-246-39	M56-44	

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STRUCTURE: R.H. Saunders G.S.

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ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
125	"Minimum Cement Requirements St. Lawrence Concrete Mixes"	Rept	Concrete mixes - minimum cement requirements	18/0[illegible]/56	14-7-253-438 14-7-246-39 14-7-245-5	56-186	
126	"Minimum Cement Requirements"	Rept	Concrete mixes - minimum cement requirements	03/05/56	14-7-253-438 14-7-245-5	56-219	
127	"Petrographical Examination of Brighton Sand"	Rept	Petrographical examination - Brighton sand	25/05/56	14-7-246-39	M56-57	
128	"Petrographic Examination of Dolomitic Rock From Brockville (Second Report)"	Rept	Petrographical examination - Brockville dolomite	28/05/56	14-7-246-39	M56-58	
129	"Powerhouse Deck Waterproofing Details"	Rept	Powerhouse deck waterproofing details	14/06/56	14-7-253-438	56-287	
130	"Evaluation of Retarders For Concrete-Progress Report"	Rept	Retarders for concrete - progress report	26/06/56	14-7-253-438	M56-72	

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STRUCTURE: R.H. Saunders, G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
131	"Acceptance Testing of Portland Cement - Canada Cement Company, Belleville Mill"	Rept	Cement acceptance testing (Belleville mill)	04/07/56		M56-69-1	
132	"Evaluation of Retarders for Concrete Masonry Program No. 120 Final Report"	Rept	Retarders for concrete - final report	31/07/56	14-7-246-38	M56-77	
133	"Diffusivity and Thermal Expansion Coefficients of St. Lawrence Concrete"	Rept	Diffusivity and thermal expansion coefficients of concrete	02/08/56	14-7-253-438	M56-78	
134	"Sampling of Portland Cement - Canada Cement Company Belleville Mill	Rept	Cement sampling - (Belleville mill)	13/08/56		M56-81	

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STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
135	"Cooling of Aggregate Stockpile - St Lawrence Power Project"	Rept	Cooling of aggregate stockpiles.	29/08/56	14-7-246-38 14-7-253-438	56-407	
136	"Mix Design Considerations for Fly Ash Concrete Ice Sluice Girders - St. Lawrence Power Project"	Rept	Ice sluice girders - fly ash concrete mix design	29/08/56	14-7-246-38 14-7-253-438	56-406	
137	"Tests on Building Bricks St. Lawrence Power Project"	Rept	Building bricks - tests	06/09/56		56-416	
138	"Air Void Determinations on Two Concrete Samples Containing Different Air Entraining Agents"	Rept	Air entraining agents - air void determination on concrete samples	06/11/56		M56-106	

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RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
139	"Retarding Admixtures for Concrete"	Rept	Retarding admixtures for concrete	09/11/56		56-508	
140	"Potential Alkali Reactivity of Cement /Aggregate Combinations St. Lawrence Power Project"	Rept	Cement/aggregate combinations - potential alkali reactivity	14/11/56	14-7-246-38	M56-108	
141	"Methods of Measuring Moisture in Concrete Sand"	Rept	Moisture measurement in sand	26/11/56		56-521	
142	"Petrographic Examination of Blended Sand St. Lawrence Power Project"	Rept	Petrographical examination - blended sand	11/12/56	14-7-246-38	M56-117	
143	"St. Lawrence Cement Company Clarkson Mill - Details of Operation"	Rept	Cement - details of operation of Clarkson mill	18/12/56		M56-119	

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STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

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		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
144	"Investigation of Fire Damage - Townsite No. 2 St. Lawrence Power Project"	Rept	Fire damage - Townsite No. 2	01/03/57		57-99	
145	"Petrographic Examination of Natural Sand From Cornwall Location No. 24"	Rept	Petrographical examination - location No. 24 (natural sand)	02/05/57	14-7-246-37	M57-27	
146	"Freezing - Thawing Tests on Concrete Brick St. Lawrence Power Project"	Rept	Building bricks - freeze/thaw test	16/05/57		57-222	
147	"Petrograhical Examination of Crushed Gravel From Location No. 4, Stuart Pit (Third Position)"	Rept	Petrographical examination - location No. 4, Stuart Pit (crushed gravel)	21/08/57	14-7-246-37	M57-43	

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STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
148	"The Effect of Cement on the Strength Levels of Concrete - St. Lawrence Power Project"	Rept	Effect of cement on strength level of concrete	26/09/57	14-7-246-37	57-392	
149	"Mineralogical and Petrographical Examination of Soil Samples From Richards Landing Dyke Area at Cornwall"	Rept	Richards Landing Dyke area - mineralogical and petrographical examination of soil samples	25/10/57	14-7-246-37	57-428	
150	"Collection of Material From Gravel Pits and Quarries in the St. Lawrence Lowlands"	Rept	Material collected from gravel pits and quarries	28/10/57		M57-54	
151	"Comparison of White Portland Cements - Belgian and Mudusa - St. Lawrence Power Project"	Rept	Comparison of cements - Belgian and Medusa	10/01/58	14-7-253-435	MM-58-2	

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STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
152	"Cement Estimates and/ or Shipments for 1955, 1956 and 1957"	Rept	Cement - estimates and shipments for 1955 - 1957	17/01/58		M58-2	
153	"Petrographical Examination of Cornwall Center Rocks Having High Sodium Sulphate Losses"	Rept	Petrographical examination - Cornwall Center rocks having high sodium sulphate losses	12/05/58		M58-35	
154	"Petrographic Examination of Manufactured Sand From the Cornwall Center Quarry"	Rept	Petrographical examination - Cornwall Center quarry (manufactured sand)	22/08/58	14-7-246-36	M58-69	
155	"Preliminary Proportioning Tests Masonry Research Program No. 92 - St. Lawrence Power Project"	Rept	Proportioning tests - preliminary tests	18/12/58	14-7-246-36	MH58-7	

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STRUCTURE: R.H. Saunders G.S.

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ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
156	"Sand/Stone Ratio Studies, Masonry Research Program No. 98 St. Lawrence Power Project"	Rept	Sand/stone ratio studies.	18/12/58	14-7-246-36	MH58-8	

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ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.
RIVER SYSTEM: St. Lawrence
PERIOD: 1954-1959

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
	Concrete Inspectors Daily Reports by Pour Number		Concrete inspectors daily reports by location				"
1	PH-1 - PH-200	Insp	+Powerhouse	02/56-05/56	14-7-245-10		
2	PH-201 - PH-400	Insp		05/56-09/56	14-7-245-11		
3	PH-401 - PH-600	Insp		09/56-01/57	14-7-245-12		
4	PH-601 - PH-800	Insp		01/57-03/57	14-7-245-13		
5	PH-801 - PH-1000	Insp		03/57-05/57	14-7-245-14		
6	PH-1001 - PH-1200	Insp		05/57-07/57	14-7-245-15		
7	PH-1201 - PH-1400	Insp		07/57-08/57	14-7-245-16		
8	PH-1401 - PH-1600	Insp		08/57-09/57	14-7-245-17		
9	PH-1601 - PH-1800	Insp		09/57-10/57	14-7-245-18		
10	PH-1801 - PH-2000	Insp		10/57	14-7-245-19		
11	PH-2001 - PH-2200	Insp		10/57-11/57	14-7-245-20		
12	PH-2201 - PH-2500	Insp		11/57-12/57	14-7-254-466		
13	PH-2501 - PH-2800	Insp		12/57-02/58	14-7-245-21		
14	PH-2801 - PH-3100	Insp		02/58-04/58	14-7-245-22		
15	PH-3101 - PH-3401	Insp		04/58-05/58	14-7-245-23		
16	PH-3402 - PH-3700	Insp	(Includes long term concrete tests (5 years))	05/58-06/58	14-7-245-24		
17	PH-3701 - PH-4101	Insp		06/58-08/58	14-7-245-25		
18	PH-4102 - PH-4518	Insp		08/58-07/59	14-7-245-26		

+Index for location of pours on the structure by pour numbers in Archive files 14-7-245-10, 14-7-245-11, 14-7-245-25

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
	Concrete Inspectors Daily Reports by Pour Number		Concrete inspectors daily reports by location.				
19	TF-1 - TF-30	Insp Data	Tunnel and Flume (plus record of concrete tests).	12/54-08/55	14-7-253-457		
20	SI-1 - SI-4	Insp Data	Repairs to Sheek Island Wier (plus record of concrete tests).	08/55-09/55	14-7-254-463		
21	PH-D-1 - PH-D-72	Insp Data	Powerhouse Drainage Diversion (plus record of concrete tests).	10/55-05/57	14-7-254-465		
22	PH-AT-1 - PH-AT-26	Insp Data	Powerhouse Access Tunnel (plus record of concrete tests).	11/55-06/56	14-7-254-464		
23	IM-1 - IM-170	Insp	Miscellaneous Pours.	02/56-06/58	14-7-245-27		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
	Concrete Inspectors Daily Reports by Pour Number		Concrete inspectors daily reports by location				
24	TA-1 - TA-151	Insp Data	Townsite #1 (plus record of concrete tests).	03/56-08/58	14-7-245-28		
25	ISD-1 - ISD-20	Insp Data	Iroquois Rehabilitation (plus record of concrete tests).	04/56-11/56	14-7-245-29		
26	SIP-1 - SIP-10	Insp Data	Spencer Island (plus record of concrete tests).	04/56-06/57	14-7-245-30		
27	TAN-1	Insp	Townsite #1	05/56	14-7-245-31		
28	CS-1 - CS-362	Insp	Diversion Canal Closure Structure	06/56-12/56	14-7-245-32		
29	TAE-1 - TAE-10	Insp	Town #1	07/56-08/56	14-7-246-33		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
	Concrete Inspectors Daily Report by Pour Number		Concrete inspectors daily reports by location				
30	PH-R-1 - PH-R-32	Insp	Powerhouse - repair	09/56-04/59	14-7-246-34		
31	PH-EW-1 - PH-EW-40	Insp	Powerhouse - extra work	10/56-10/58	14-7-246-35		
32	RSB-FI - RSB-F2	Insp	Town #2	05/57	14-7-246-54		
	Concrete Test Records by Location		Concrete test records by location.				
33	Concrete Lab Record Book	Data	Concrete lab record book containing results of all concrete tests performed on site.	06/56-07/59	14-7-270-1358		
34	Powerhouse	Data	Powerhouse - 7 day strength	03/56-05/59	14-7-253-453		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
	Concrete Test Records by Location		Concrete test records by location.				
35	Powerhouse	Data	Powerhouse - summary (including fly ash concrete).	06/56-05/59	14-7-253-454		
36	Powerhouse	Data	Powerhouse	02/56-07/56	14-7-253-455		
37	Diversion Canal Closure	Data	Diversion Canal Closure Structure (mainly 7 day strength).	06/56-07/56	14-7-253-452		
38	Diversion Canal Closure	Data	Diversion Canal Closure Structure (summary).	06/56-12/56	14-7-253-456		
39	Townsite #1 and #2	Data	Townsite #1 and #2, Morrisburg, Iroquois Rehabilitation	12/56-12/57	14-7-253-451		
40	Long Sault Parkway	Data	Long Sault Parkway	08/55-07/58	14-7-254-468		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
	Concrete Test Records by Location		Concrete test records by location				
41	CNR Relocation Section A	Data	CNR Relocation Section A	07/55-07/56	14-7-253-460		
42	CNR Relocation Section B and C	Data	CNR Relocation Section B and C.	08/55-07/56	14-7-253-461		
43	Iroquois Rehabilitation	Data	Iroquois Rehabilitation	07/55-08/57	14-7-253-462		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
44	St. Lawrence Power Project - Powerhouse Plotting Data	Data	Handwritten statistical calculations of concrete tests for the powerhouse.	08/56- 02/57	14-7-248-197 14-7-248-198		
45	St. Lawrence Power Project - Aggregate Analysis	Data	Summary of aggregate tests.	02/56- 11/58	14-7-245-6		
46	Tests on Fly Ash - St. Lawrence Power Project	Data	Test results on samples of fly ash.	03/01/57 21/02/57 23/04/57 05/11/57 11/12/57 14/04/58	14-7-253-437 14-7-253-437 14-7-246-37 14-7-246-37 14-7-246-37 14-7-246-36	MM57-1 MM57-3 MM57-4 MM57-21 MM57-25 MM58-11	
47	Cement Inspection for the Following Periods Dec 1955 - Feb 1956 July 1956 Aug, Sept, 1956 Oct, Nov, Dec, 1956	Rept Insp	Cement inspection reports.	 04/07/56 04/08/56 12/10/56 09/01/57	 14-7-246-38 14-7-246-38 14-7-253-438 14-7-246-38 14-7-246-37 14-7-253-437	 56-319 56-388 56-466 57-8	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
48	"St. Lawrence Power Project Concrete Control Report"	Rept	Progress report put out for each of these months: Aug 1956 - Aug 1957 Oct 1957 - Nov 1957 Jan 1958 - May 1958	1956-1958	14-7-253-444 14-7-253-443		
49	"Concrete Control Report for April 1956" "Concrete Control Report for August 1956"	Rept	Reports published by "The Power Authority of The State of New York - St. Lawrence Power Project"	04/56 08/56	14-7-253-438		"
50	"Cement - Complete Chemical Analysis"	Rept Data	Chemical analysis of cement samples.	1954-1957			L 452.2.1*
51	Cement - C.L. Cards	Data	Results of all physical tests on cement.	1954-1958			Conc. Lab*

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.
RIVER SYSTEM: St. Lawrence
PERIOD: 1951-1959

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	File - "St. Lawrence Project General 1951, 52, 53"	Genl	Reports, notes, memos, correspondence on - potential aggregate locations - preliminary estimates of quantities of concrete materials	1951-53	14-7-253-441		
2	File - "St. Lawrence Project General 1954"	Genl	Reports, notes, memos, correspondence on - aggregate testing and comparison survey - tests on rock samples from drill holes - results of St. Lawrence Seaway aggregate investigation - fly ash concrete - concrete control final report	1954	14-7-253-440		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
3	File - "St. Lawrence Power Project General 1955"	Genl	Reports, notes, memos, correspondence on - testing and investigation of concrete aggregates and railway ballast - tests on concrete blocks and sewer pipe - air entraining admixtures - concrete specifications for Long Sault Dam	1955	14-7-253-439		
4	File - "St. Lawrence Power Project - General 1956"	Genl	Reports, memos, correspondence on - winter concreting (small jobs) - evaluation of retarders - investigation of crusher dust - concrete inspectors report (precast concrete)	1956	14-7-253-438		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
5	File - "St. Lawrence Power Project - General 1957"	Genl	Reports, notes, memos, correspondence on - "Observations of Fly Ash Concrete Placing" - concrete inspector reports on bricks and precast concrete - pozzolith air entraining, curing compounds - tests and reports on water, building blocks and aggregate	1957 28/01/57	14-7-253-437		
6	File - "St. Lawrence Power Project - General 1958"	Genl	Reports, memos on - concrete inspectors report (precast concrete) - contraction joint treatment - epoxy resins for concrete repair - index of concrete pour numbers and locations	1958	14-7-253-435		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
7	File - "St. Lawrence River Project Vol 1"	Genl	Notes, memos, correspondence on - "Cement Testing - St. Lawrence Power Projects" - classification of accounts - aggregate survey and investigation	09/54 30/09/54	14-7-246-48		
8	File - "St. Lawrence River Project Vol 2"	Genl	Reports, notes, memos, correspondence, draft specification on - concrete aggregates	10/54-11/54	14-7-246-47		
9	File - "St. Lawrence River Project Vol 3"	Genl	Notes, memos, correspondence, test results, sketchs on - aggregate tests	12/54-01/55	14-7-246-46		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
			- compressive strength of rock cores - use of fly ash - cement sand content of mass concrete				
10	File - "St. Lawrence River Project Vol 4"	Genl	Notes, memos, correspondence on - concrete placing - concrete aggregate tests - cement estimates - 6" drill core investigation for aggregate	02/55-03/55	14-7-246-45		
11	File - "St. Lawrence River Project Vol 5"	Genl	Reports, notes, memos, correspondence on - air entraining admixtures - concrete aggregate studies and tests - aggregate tests by Dept. of Mines and Technical Studies, Ottawa	04/55-05/55	14-7-246-44		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
12	File - "St. Lawrence River Project Vol 6"	Genl	Reports, notes, memos on - Long Sault Dam foundation - concrete aggregates - tests on concrete blocks - "Design Criteria for St. Lawrence Concrete Mixes (minutes of meeting)	06/55- 08/55 30/06/55	14-7-246-43		
13	File - "St. Lawrence River Project Vol 8"	Genl	Notes, memos, correspondence on - air entraining admixtures - railway ballast - large scale pumpcrete test - aggregate tests	11/55- 12/55	14-7-246-42		
14	File - "St. Lawrence River Project Vol 9"	Genl	Reports, memos, correspondence on - aggregate studies - air entraining admixtures - horizontal construction joints in mass concrete - test on rock cores	01/56	14-7-246-41		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
15	File - "St. Lawrence River Project Vol 10"	Data	Results from bleeding tests on concrete using various sands.	02/56-03/56	14-7-246-40		
16	File - "St. Lawrence River Project Vol 11"	Genl	Reports from testing laboratories - Dept of Public Works, Ottawa. Memos, correspondence on - cement retarders and curing compounds - cement content of mass concrete	04/56-06/56	14-7-246-39		
17	File - "St. Lawrence River Project Vol 12"	Genl	Reports, memos on - testing of building blocks - fly ash concrete - use of untested cement	07/56-12/56	14-7-246-38		
18	File - "St. Lawrence River Project Vol 13"	Genl	Reports, memos on - fly ash concrete placing - tests on building bricks	01/57-12/57	14-7-246-37		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
19	File - "St. Lawrence Project 6" Drilling Investigation"	Genl	Report on aggregate search, aggregate test results and bore hole logs.	02/02/55	14-7-245-1		
20	File - "Logs of Small Cores"	Data	Bore hole data sheets from aggregate survey	05/54-03/55	14-7-245-2		
21	"Standard Practice for Concrete With Guide Specification for Concrete"	Spec	Concrete specification (Dept of the Army Corps of Engineers, Office of the Chief of Engineers)	10/53	14-7-245-3		
22	File - "Summary of Remarks on Core Log Data Supplied by Dept. of Transport"	Rept	Reports on core logs from 9 sites for aggregate survey.	01/54-06/54	14-7-245-4		
23	File - "St. Lawrence Project Field and Lab Analysis Summary"	Data	Data sheets for aggregate tests and summary sheets on test holes.	12/58-05/55	14-7-245-7		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
24	File - "St. Lawrence Project Aggregate Tests"	Rept	Total of 22 reports dealing with the testing of aggregates.	1954-1955	14-7-245-8		"
25	File - "Summary of Test Results - St. Lawrence Aggregates"	Data	Test results on aggregate.	02/54-08/54	14-7-245-9		
26	File - "St. Lawrence Grenadier Island - Aggregate Survey"	Corr	Correspondence (3 letters) on - Grenadier Island aggregate survey	09/66	14-7-246-51		
27	File - "St. Lawrence Project - Costs"	Genl	Requisition forms, summaries and estimates of costs associated with testing of aggregate	1951-1959	14-7-253-442		
28	File - "St. Lawrence Power Development - Field Inspectors Reports"	Rept	Field inspections reports on gravel pits	04/54-12/54	14-7-253-445		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
29	File - "St. Lawrence Project Aggregate Survey - Field"	Rept	List of potential aggregate sites in Canada and U.S.A. Summary of field analysis on these sites.	02/54-08/54	14-7-253-446		
30	File - "St. Lawrence Project - Log of Samples Taken by Barge"	Insp	Field inspection logs for aggregate investigation - Lake of Two Mountains, Lake St. Louis, Lake St. Francis, Grenadier Island	05/54-06/54	14-7-253-447		
31	File - "St. Lawrence Project Diamond Drilling"	Insp	Logs of diamond drill holes drilled by Ontario Department of Highways (aggregate search)	Received 06/01/54	14-7-253-448		
32	File - "Alphabetical List of Properties"	Genl	List of properties for aggregate search	No Date	14-7-253-449		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
33	File - "Location Drawings"	Drwg	Drawings of location of properties for aggregate survey	15/03/55 DWG 1954	14-7-253-450		
34	"St. Lawrence Power Project Tendering Documents for Provision of Crushed Rock or Crushed Gravel and Sand"	Spec	Tendering document - C-98-54 - C-99-54	1954?	14-7-254-467		
35	File - "Aggregate Survey"	Rept	Summary of sites for preliminary aggregate survey with test results	11/53-11/54	14-7-270-1357		
36	File - "St. Lawrence Dev. - Chemical Tests"	Data	Reports on chemical analysis of concrete aggregate	1954-1955			L 51.9.1*
37	File - "St. Lawrence Dev. Aggregate Tests"	Data	Concrete aggregate test results	5/52-2/54 2/54-7/54 7/54-11/57 11/57-7/59			L 51.2.1* L 51.2.2* L 51.2.3* L 51.2.4*

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
38	File - "St. Lawrence P.P. - Aggregate Test - Railway Ballast"	Data	Results and reports on material for use as railway ballast	10/54-06/58			L 51.2.9*
39	File - "St. Lawrence Dev. - Aggregate Tests - Limestone "A""	Genl	Photos, memos, reports, notes, drawings on - aggregate tests and potential aggregate locations	02/54-11/56			L 51.2.10*
40	File - "St. Lawrence Miscellaneous"	Genl	Notes, and memos regarding reports produced for the St. Lawrence project	1956-1966			L 51.3.2*
41	File - "St. Lawrence Dev. Concrete Tests"	Genl	Memos, reports, data sheets notes on - concrete materials and testing	1954-1955 1955-1958 1958			L 51.6.1* L 51.6.2* L 51.6.3*
42	File - "St. Lawrence Dev. Concrete - Large Scale Mix Tests"	Genl	Memos, test results, reports, notes on - large scale pumpcrete tests	1956			L 51.6.9*

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
43	File - "St. Lawrence Dev. Instructions"	Genl	Correspondence, memos, handwritten notes on - requests and instructions for material tests	1953-1954 1954-1958			L 51.1.1* L 51.1.2*
44	File - "St. Lawrence Dev. Admixture Tests"	Genl	Reports, notes, memos on - tests on concrete admixtures	1955-1956			L 51.6.10*

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 3.8 - INSPECTION TESTING AND INVESTIGATION REPORTS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.
RIVER SYSTEM: St. Lawrence
PERIOD: 1957 - 1983

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	"Long Term Concrete Tests"	Rept	Results of long term tests on concrete cylinders.	14/06/83		S83-20-H	
2	"Repair of Scaling of Bridge Overpasses - Cornwall Area"	Memo	Concrete repairs to bridge overpasses.	04/08/59	14-7-253-435		
3	"Evaluation of Epoxy Resin Applications for the Repair of Concrete"	Rept	Use of epoxy resin in the repair of concrete.	11/08/59	14-7-253-435	59-325	
4	"Air Void Characteristics of Prepakt Concret Samples From Cornwall"	Rept	Air-void characteristics of Prepakt concrete samples.	12/08/59		M59-52	
5	"St. Lawrence Power Project-Length Change Measurements on 3 1/2" x 4" x 16" Concrete Prisms"	Rept	Study of expansion properties of concrete.	24/08/60	14-7-246-36	MM60-35	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 3.8 - INSPECTION TESTING AND INVESTIGATION REPORTS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
6	"St. Lawrence Power Project - Condition of Concrete in Ice Sluice Piers"	Rept	Study of concrete in ice sluice piers.	26/08/60	14-7-246-36	M60-49	
7	"Proposal for the Removal and Repair of Deck Waterproofing - R.H. Saunders G.S."	Memo	Repair of deck waterproofing.	25/01/61			*Binder: 47-853
8	"Corrosion of Copper and Its Relation to the Use of Deck Heating Cable at R.H. Saunders G.S."	Rept	Corrosion of copper as related to the deck heating cable.	07/03/61	14-7-252-384	M61-20	
9	"Field Trial of Epoxy Resin Re-Surface Mortar"	Rept	Epoxy resin field trials for the repair of concrete.	27/06/61	14-7-253-435	61-209	

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 3.8 - INSPECTION TESTING AND INVESTIGATION REPORTS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
10	"Exact Location of Some Crushed Rock Samples Tested During the Aggregate Studies for the St. Lawrence Development"	Rept	Location of rock tested during aggregate survey.	07/12/65	14-7-246-50	M65-61	
11	St. Lawrence - R.H. Saunders G.S. Cornwall Dyke - Rip Rap	Data	Notes, memos, test results and correspondence on Rip Rap and its testing.		14-7-246-50		
12	"R.H. Saunders G.S. - Cornwall Dyke - Tests on Stone for Slope Protection"	Rept Data	Test on stone for Rip Rap.	18/01/66	14-7-246-50	66-26-H	
13	"Petrographic Interpretation of Results of Freeze Thaw Tests on Rip Rap for Slope Protection of Cornwall Dyke"	Rept Data	Tests on stone for Rip Rap.	19/02/66		S66-8-R	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 3.8 - INSPECTION TESTING AND INVESTIGATION REPORTS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
14	"Analysis of Groundwater R.H. Saunders G.S."	Rept Data	Test on groundwater.	17/08/71	14-7-253-434	K71-174-K	"
15	"Sulphates in Groundwater R.H. Saunders G.S."	Rept Data	Test on groundwater.	13/01/72 01/05/73 27/07/73 02/01/74 26/06/74 19/12/74 28/01/76	14-7-253-434 14-7-253-434 14-7-253-434 14-7-252-384 14-7-252-384 14-7-253-434 14-7-252-384	C72-4-K C73-71-K C73-148-K C74-3-K C74-102-K C74-151-K C76-21-K	
16	"Thunder Bay - Cornwall Report on Waterstop Shrinkage"	Rept	Waterstop shrinkage.	29/12/78		78-594-K	
17	"R.H. Saunders G.S. - Dam Deformation Study"	Rept	Dam deformation study.	15/10/81		81-320-H	
18	"R.H. Saunders G.S. - In-Situ Stess Measurement Project"	Rept	In-situ stress measurement project.	29/10/81		81-375-H	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 3.8 - INSPECTION TESTING AND INVESTIGATION REPORTS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: R.H. Saunders G.S.

RIVER SYSTEM: St. Lawrence

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
19	"R.H. Saunders G.S. Monitoring of Concrete"	Rept	Monitoring of concrete.	24/02/83		83-76-H	
20	"R.H. Saunders G.S. Throat Ring Distortions"	Memo	Throat Ring distortions.	17/06/83			P-842 SAU*

*Work file for internal use of Concrete Technology Section

APPENDIX B

Iroquois Dam

The following item number and heading refer to the table "Format of Technical Histories" located in the Civil Works Department document "Terms of Reference for the Civil Research Department".

		Page No
Item 2.4	Construction Plans and Specifications	71

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Iroquois Dam
RIVER SYSTEM: St. Lawrence
PERIOD: 1956

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	"Concrete Control Report for April 1956" "Concrete Control Report for August 1956"	Rept Data	Reports published by "The Power Authority of The State of New York - St. Lawrence Power Project"	04/56 08/56	14-7-253-438		

APPENDIX C

Arnprior GS

The following item numbers and headings refer to the table "Format of Technical Histories" located in the Civil Works Department document "Terms of Reference for the Civil Works Department".

		Page No
Item 2.3	Design Assumptions and Criteria	73
Item 2.4	Construction Plans and Specifications	76
Item 2.5	Correspondence Files	78

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Arnprior G.S.
RIVER SYSTEM: Madawaska
PERIOD: 1972-1976

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	"Potential Sources of Concrete Aggregate - Arnprior G.S."	Rept	Aggregate survey	12/01/72	14-7-265-1055	72-5-H	
2	"Aggregate Evaluation -Arnprior G.S. Progress Report"	Rept	Aggregate evaluation report No. 1	20/03/73	14-7-265-1056	S73-9-H	
3	"Arnprior G.S. Investigation of Proposed Quarry Sites For Concrete Aggregate"	Rept	Aggregate survey - proposed quarry sites	17/04/73		73-128-H	
4	"Visit to Braeside Quarry - Arnprior G.S."	Rept	Visit to Braeside quarry	28/05/73	14-7-265-1056	S73-20-H	
5	"Aggregate Evaluation Arnprior G.S. Progress Report No. 2"	Rept	Aggregate evaluation report No. 2	06/06/73	14-7-265-1056	S73-24-H	
6	"Arnprior G.S. - Concrete Proportions"	Rept	Concrete proportions	26/06/73		73-212-H	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Arnprior G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
7	"Arnprior G.S. - Concrete Proportions, Report No. 2"	Rept	Concrete proportions report No. 2	11/07/73	14-7-265-1056	73-212-H	
8	"Braeside Quarry Aggregate Evaluation - Arnprior G.S."	Rept	Aggregate evaluation Braeside quarry	12/07/73	14-7-265-1056	S73-28-H	
9	"Arnprior G.S. - Proportioning Studies"	Rept	Proportioning studies	05/10/73	14-7-265-1056	SM73-14-K	
10	"Petrograpic Numbers Determined on Sands From the Arnprior G.S. Area"	Rept	Petrographic numbers for Arnprior area sand	08/11/73	14-7-265-1056	S73-53-K	
11	"Re-examination of Braeside Quarry as a Concrete Aggregate Source"	Rept	Aggregate survey - Braeside quarry	06/11/74	14-7-265-1056	S74-62-H	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Arnprior G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
12	"Alkali Aggregate Reaction - Arnprior G.S. Aggregates (CSA A23.2.24 Method)"	Rept	Aggregate tests - alkali reaction	21/11/75	14-7-265-1056	S75-35-H	
13	"Petrographical Examination of Aggregate Samples From Arnprior-Braeside Pit and Quarry (P-2481, P-2480)"	Rept	Petrographic examination - Braeside quarry	26/03/76		S76-10-H	
14	"Arnprior Town Bridge (Site 29 - 143 West) Extension Joint Failure"	Rept	Extension joint failure on town bridge	26/05/78		78-250-H	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Arnprior G.S.
RIVER SYSTEM: Madawaska
PERIOD: 1973-1978

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	"Arnprior G.S. - Concrete Quality Control Report"	Rept	Ontario Hydro Ref # NA9.20861. An extensive report on results of the concrete inspection for this project. Includes - concrete quality control procedures - progress charts - material test results	11/77			P842ARN*
2	Lab File - "Arnprior G.S."	Data	Handwritten notes, test reports, correspondence on - aggregates, fly ash concrete and cement	01/73-04/78			L 89.1.1*
3	Arnprior G.S. - Cement and Fly Ash Test Results	Data	Memos and test reports on - fly ash/pozzolan tests - cement tests - concreting	05/73-08/75	14-7-265-1058		

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Arnprior G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
4+	Cement Test Results	Data	Cement test reports	11/73-04/75	5-8-116-1		
5+	Concrete Test Results	Data	Concrete aggregate test reports	05/73-08/74	5-8-116-2		
6+	Fly Ash Test Results	Data	Fly ash and cement test reports and summary of aggregate tests	10/73-06/75	5-8-116-3		
7	Arnprior Generating Station Contract C-3 Technical Specification Concrete Items	Spec	Specification item 9-12 on concrete materials and placing - produced by Acres Consulting Service Ltd.	16/05/73	14-7-265-1057		
8	Lab File - "Cement - Chemical Analysis"	Data	Results of chemical analysis on cement	1973-1978			L 452.2.2*
9	Cement C.L. Card	Data	Results of tests on cement	1973-1978			Conc. Lab*
+	Not much material in these files.						

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Arnprior G.S.
RIVER SYSTEM: Madawaska
PERIOD: 1972-1978

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	File "Arnprior G.S. General"	Genl	Notes, memos, correspondence, test reports on - concrete aggregate survey - aggregate tests - minutes of project meetings - use and supply of fly ash - concreting methods - length change in marble core	1972-1973	14-7-265-1055		
2	File "Arnprior G.S. General 2"	Genl	Notes, memos, correspondence, test reports on - concrete aggregates - fly ash - concreting operations - reports for field concrete specimens	1973-1975	14-7-265-1056		
3	"Madawaska River Bridge Arnprior"	Memo Corr	Memos and correspondence on - Madawaska River bridge	1978			P842ARN*

*Work file for internal use of Concrete Technology Section

APPENDIX D

Stewartville GS

The following item numbers and headings refer to the table "Format of Technical Histories" located in the Civil Works Department document "Terms of Reference for the Civil Research Department".

		Page No
Item 2.3	Design Assumptions and Criteria	80
Item 2.4	Construction Plans and Specifications	83
Item 2.5	Correspondence Files	85
Item 3.8	Inspection Testing and Investigation Reports	88

Stewartville GS - Extension

Item 2.3	Design Assumptions and Criteria	93
Item 2.4	Construction Plans and Specifications	95
Item 2.5	Correspondence Files	99

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S.
RIVER SYSTEM: Madawaska
PERIOD: 1946-1948

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	"Stewartville Concrete Aggregate - McLaren's Property"	Rept	Aggregate survey - McLaren's property	01/04/46	14-7-252-411	LO 40184	
2	"Concrete Proportioning Studies Stewartville Development"	Rept	Concrete proportioning studies	24/06/46		LO 40248	
3	"Geophysical Exploration of Dam Sites by Resistivity Methods - Stewartville 1945"	Rept	Geophysical exploration of the dam site	09/08/46		LO 40207	
4	"Concrete Proportioning Studies for Stewartville Development"	Rept	Concrete proportioning studies	31/01/47	14-7-252-411	LO 40248	
5	"Some Thermal Considerations in the Placement of Mass Concrete With Particular Reference to Stewartville Dam"	Rept	Placing of mass concrete	20/02/47		LO 40287	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
6	"Age-Strength Relations for Stewartville Concrete"	Rept	Age-strength relations for concrete	17/04/47		LO 40248	
7	"Concrete Proportioning Studies - Stewartville P.D."	Rept	Concrete proportioning studies	12/08/47		LO 40248	
8	"Tests on Prepakt Cores from Experimental Cube Stewartville Development"	Rept	Tests on prepakt cores (experimental cube)	02/02/48		LO 40248	
9	"A Study of Some of the Cracks in the Stewartville Dam"	Rept	Study of cracks in main dam	25/03/48		LO 1544	
10	"Stewartville Development Alkali - Aggregate Reaction Tests on Materials from McLaren's Pit"	Rept	Aggregate test - Alkali reaction tests on material from McLaren's pit.	09/06/48		LO 40248	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
11	"Observations of Prepakt Concrete Used on Structures for the Commission"	Rept	Observations of prepakt concrete used on structures	07/48			*Binder: 6-89
12	"Tests of Aggregates for Expansion When Combined with High Alkali Cement - Aggregates from Stewartville Aguasabon and Tunnel Developments"	Rept	Aggregate test - expansion tests when material mixed with high alkali cement	25/08/48	14-7-252-420	LO 40248 LO 40281 LO 40469	
13	"Field Tests of Air Entrained Concrete Stewartville Development"	Rept	Tests on air entrained concrete	28/12/48	14-7-252-411	LO 40594	

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S.

RIVER SYSTEM: Madawaska

PERIOD: 1946-1948

PREPARED BY: E.J. McColm

REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	"A History of the Stewartville Development as Recorded by Concrete Control Section"	Rept	Comprehensive report dealing with most aspects of the job pertaining to concrete including drawings, material tests, reports and photos.	09/50	14-7-253-422		
	Concrete Inspectors Daily Reports by Area		Concrete inspector daily reports.				
2+	Powerhouse	Insp Data	Daily reports plus concrete test results	03/47-09/48	14-7-253-427		
3+	Diversion Tunnel	Insp Data	Daily reports plus concrete test results	1946-1948	14-7-253-429		
4+	Springtown Bridge	Insp Data	Daily reports plus concrete test results	04/48-10/48	14-7-253-428		
+	These concrete report files are not complete and contain only a few random reports.						

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
5+	Burnstown Bridge	Data	Concrete test results	04/47-08/48	14-7-252-409		
6+	Operators Colony	Data	Concrete test results	1946-1948	14-7-253-425		
7	Daily Concrete Reports 1946-1949 Main Dam	Data	Record of concrete tests for the main dam	12/46-12/48	14-7-253-423		
8	Plotting Data	Data	Handwritten statistical calculations of concrete tests with summary of results.	04/56	14-7-253-426		
9	Lab File - "Cement Chemical Analysis"	Data	Results of chemical analysis on cement	1946-1948			L 452.2.1*
10	Cement C.L. Cards	Data	Results of tests on cement.	1946-1948			Conc. Lab*
+	These concete report files are not complete and contain only a few random reports.						

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S.

RIVER SYSTEM: Madawaska

PERIOD: 1945-1948

PREPARED BY: E.J. McColm

REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	File "Madawaska Aggregate Survey Stewartville 1945 No. 1"	Genl	Sketchs, drawings, handwritten notes on aggregate survey and tests undertaken at various sites	1945	14-7-253-430		
2	Madawaska- Stewartville Test Hole Records of Aggregate Survey 1945 No. 2	Genl	Results of tests on bore hole material as part of the aggregate survey	09/45-03/46	14-7-253-431		
3	Test Pit Results From Gillan/McCallum, Jamieson, McLaren Properties	Genl	Record of test pit and sketchs of their location	1945	14-7-265-1055		
4	File "Stewartville Dev. - McLaren Pit"	Genl	Memos, sketchs, handwritten notes, drawings, aggregate tests on McLaren pit	1946-1952	14-7-253-424		
5	File "Stewartville G.S. - General (1946 - 47)"	Genl	Memos, correspondence notes sketchs on concrete aggregates, aggregate tests and concrete placing operations	1946-1948	14-7-252-411		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
6	File "Stewartville G.S. - General (1948)"	Genl	Memos, correspondence notes sketchs test results on - long term concrete tests - McLaren's pit - frozen concrete - diamond drilling of main dam - concrete patching and testing	1948-1963	14-7-252-420		
7	"Preliminary Report on the Prepakt Intrusion Method of Placing Concrete, Tunnel Control Section - Stewartville"	Rept	Report on concrete placing - tunnel control section	13/12/46			HIST*
8	"Prepakt Stewartville P.D. Report on Prepakt Concrete of the Upstream Portal of Stewartville P.D. Division Tunnel"	Rept	Report on concrete placing - upstream portal of diversion tunnel	04/10/46			HIST*

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
9	File "Stewartville GS"	Genl	Memos, photos, test results handwritten notes on - mixing plant and materials - long term concrete tests - cracks on downstream face of dam	03/47-08/51			HIST*
10	File "Stewartville P.D. Cracks"		Reports, sketchs, drawings, test results on - cracks in powerhouse tunnel and main dam	04/48-11/48	14-7-252-410		
11	Lab File "Stewartville Development"	Genl	Test reports, correspondence, memos - lab tests on aggregate, concrete proportioning, cement	03/46-07/48			L 18.1*
12	"Stewartville" "Hydro News"	Genl	Various publications issued by Ontario Hydro on this project	1948			HIST*

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 3.8 - INSPECTION TESTING AND INVESTIGATION REPORTS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S.
RIVER SYSTEM: Madawaska
PERIOD: 1952-1985

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	"Soniscope Investigation of Surface Cracks In the Stewartville Dam"	Rept	Soniscope investigation of surface cracks	16/01/52	14-7-253-441	52-43	
2	"Condition of Concrete Stewartville P.D."	Rept	Inspection of concrete	28/08/52		52-607	
3	"Diamond Drilling Stewartville Dam 1952"	Rept	Diamond drilling of main dam	31/10/52	14-7-270-1366	M52-51	
4	"Preliminary Soniscope Tests on Bore Holes Stewartville G.S."	Rept	Soniscope test on bore holes in main dam	09/01/53	14-7-252-420	M53-3	
5	"Soniscope Tests Stewartville Bore Holes"	Rept	Soniscope test on bore holes in main dam	23/12/54	14-7-270-1363	54-586	
6	"Uplift Pressure in the Commissions Concrete Dams Progress Report No. 2"	Rept	Uplift pressure on dam	29/09/55		55-446	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 3.8 - INSPECTION TESTING AND INVESTIGATION REPORTS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
7	"Tests on Hardened Concrete Nominal 6" Diameter Core Stewartville Dam"	Rept	Tests on concrete cores taken from main dam	13/03/56	14-7-270-1363	M56-33	
8	"Freezing and Thawing Tests on Concrete - Stewartville Dam Cores"	Rept	Freeze/thaw tests on concrete cores from main dam	19/06/56	14-7-270-1363	M56-67	
9	"Leakage Into the Inspection Tunnel, Stewartville Dam"	Rept	Leakage into inspection tunnel	13/09/57	14-7-252-420	57-370	
10	Long Term Concrete Tests	Rept	Results of long term concrete rests for original construction and extension construction	14/06/83		S83-20-H	
11	File "Stewartville - Soniscope Test Field Data"	Genl	Field notes, correspondence test results and sketchs on - soniscope tests on main dam and 6" concrete cores from main dam	1952-1956	14-7-253-432		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 3.8 - INSPECTION TESTING AND INVESTIGATION REPORTS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
12	Proposed Program of Tests on Stewartville Cores	Spec	Proposal No. 530427-59 for tests on concrete cores	No Date	14-7-253-432		
13	Lab File "Stewartville Development"	Data	Test results and reports on diamond drill cores from main dam	1955-1956			L 18.2*
14	Lab File "Stewartville Development"	Genl	Correspondence, notes, test results and drill logs for 6" cores from main dam - long term concrete tests	1952-1983			L 18.3*
15	"Ready Mix Concrete Supply for Stewartville Remedial Works"	Rept	Supply of concrete for remedial work	15/07/83		S83-22-H	
16	"Stewartville G.S. - Review of Grouting Materials for Use in Cutting off Groundwater Seepage"	Rept	Groundwater seepage - review of grouting materials	30/08/83		83-354-H	

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 3.8 - INSPECTION TESTING AND INVESTIGATION REPORTS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
17	"Stewartville G.S. Laboratory Assessment of Grouting Materials for Use Cutting Off Groundwater Seepage"	Rept	Groundwater seepage - laboratory assessment of grouting materials	28/11/83		83-458-H	
18	Stewartville G.S. - Remedial Work	Data	Concrete report and aggregate test report	07/83-09/83			P842.161* STEW P842.21* STEW
19	File "Stewartville G.S. Grout Materials"	Corr	Correspondence regarding grout for work at Stewartville	1983			P842.262* STEW
20	"Closed Circuit Television Survey to Inspect Existing Drainage Network at Stewartville G.S. Dam For Proposed Remedial Work"	Rept	Remedial work - television inspection of existing drainage network	01/84		83-553K	

*Work file for internal use of Concerete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 3.8 - INSPECTION TESTING AND INVESTIGATION REPORTS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
21	"Stewartville G.S. - Remedial Work Supply of Ready Mix Concrete"	Rept	Supply of concrete for remedial work	28/02/84		S83-22-H APPENDUM	
22	"Use of Asphalt in Treatment of Dam Foundation Leakage Stewartville Dam"	Rept	Paper on the treatment of foundation leakage at main dam	04/85			P 842.STE*

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTION AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S. - Extension

RIVER SYSTEM: Madawaska

PERIOD: 1966-1969

PREPARED BY: E.J. McColm

REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	"Crushed Gravel From the Jamieson Pit, Renfrew"	Rept	Aggregate survey - Jamieson Pit (crushed gravel)	08/06/66		S66-32-H	
2	"Sands from the Jamieson Pit, Renfrew"	Rept	Aggregate survey - Jamieson Pit (sand)	27/06/66		S66-34-H	
3	"Pembroke Limestone (Preliminary Report)"	Rept	Pembroke limestone	11/08/66	14-7-252-412	S66-283-H	
4	"Hydro Low Heat Cement-Hull Cement"	Rept	Cement - Hydro low heat	22/09/66	14-7-265-1082	S66-53-H	
5	"Visit to Quarries and Pits in the Arnprior - Renfrew Area"	Rept	Aggregate survey - visit to quarries	04/11/66	14-7-252-412	S66-61-H	
6	"Characteristics of Braeside (Lamieux) Limestone"	Rept	Braeside limestone	08/11/66	14-7-252-412	S66-62-H	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S. - Extension

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
7	"Special Low Heat Portland Cement Canada Cement Company Hull Mill"	Rept	Cement - special low heat	19/12/66	14-7-265-1082	SC66-67-H	
8	"Stewartville Dam Surface Strain Measurements"	Rept	Surface strain measurements	06/02/67	14-7-252-408	S67-7-H	
9	"Installation of Metal Waterstop Into Hardened Concrete Considerations for Stewartville Extension"	Rept	Installation of metal waterstop	15/02/67	14-7-252-408	67-75-H	
10	"Braeside Limestone Aggregates (Comparisons of Samples With High & Low Sulphate Losses)"	Rept	Comparison of samples of Braeside limestone aggregate	15/03/67		S67-11-H	
11	"Concrete Finishing, Transformer Decks - Stewartville"	Rept	Concrete finishing - transformer deck	14/07/69	14-7-252-408	69-234-H	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S. - Extension

RIVER SYSTEM: Madawaska

PERIOD: 1965-1969

PREPARED BY: E.J. McColm

REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
	Concrete Inspectors Daily Reports by Pour Number		Concrete inspectors daily reports by structure				
1	ST-HW-1 - ST-HW-39	Insp	Headworks	09/67-05/69	14-7-252-413		
2	ST-PH-1 - ST-PH-124	Insp	Powerhouse	02/68-02/69	14-7-252-415		
3	ST-PH-125 - ST-PH-152	Insp	Powerhouse	02/69-07/69	14-7-252-414		
4	ST-MD-1 - ST-MD-24	Insp	Main dam	06/69-07/69	14-7-252-419		
5	ST-PE-1 - ST-PE-36	Insp	Penstocks	06/68-01/69	14-7-252-418		
6	ST-SY-1 - ST-SY-8	Insp	Switchyard	04/68-10/68	14-7-252-417		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S. - Extension

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
7	ST-MP-1 - ST-MP-13	Insp	Miscellaneous permanent	11/66-07/69	14-7-252-416		
8	7-Day Strength	Data	7-Day cyclinder test results	06/65-02/69	14-7-255-552		
9	28-Day Strength	Data	28-Day cylinder test results	08/65-01/69	14-7-255-553		
10	49-Day Strength	Data	49-Day cylinder test results	12/66-12/68	14-7-255-555		
11	90-Day Strength	Data	90-Day cylinder test results	07/65-06/67	14-7-255-554		
12	Madawaska River Projects - Concrete Tests	Data	Concrete test results	08/68 06/69	14-7-257-627		
13	Cement and Fly Ash Test Reports Barrett Chute and Stewartville Ext	Insp Data	Cement and fly ash test reports	1966-1969			L 10.4.1*

*Work file for internal use of Concrete Technology Section

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DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S. - Extension

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
14	*Weekly Progress Reports-Madawaska River Projects"	Rept	Weekly progress reports for period 13/04/66 - 18/05/66	04/66-05/66	14-7-255-575		
15	"Madawaska River Projects- Monthly Progress Reports"	Rept	Monthly progress report for period 05/66 - 07/69	05/66-07/69	14-7-257-626		
16	File "Mountain Chute G.S. General Vol 6"	Genl	Minutes of project meetings	01/66-06/66	14-7-256-583		
17	File "Mountain Chute G.S. General Vol 7"	Genl	Minutes of project meetings	01/66-07/66	14-7-256-584		
18	File "Mountain Chute G.S. General Vol 8"	Genl	Minutes of project meetings	09/66-12/66	14-7-256-585		
19	File "Mountain Chute G.S. General Vol 9"	Genl	Memos, notes, tests and results on ready mix concrete and concrete test results	01/67-10/67	14-7-256-586		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S. - Extension

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
20	Lab File "Cement - Chemical Analysis"	Data	Results of chemical analysis on cement.	1965-1969			L 452.2.2*
21	Cement C.L. Cards	Data	Results of tests on cement	1965-1969			Conc. Lab*

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Stewartville G.S. Extension
RIVER SYSTEM: Madawaska
PERIOD: 1966-1967

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	File "Stewartville G.S. General 1966 Vol 1"	Genl	Memos, correspondence, notes, test results, reports on - surface strain in concrete - aggregate and cement tests - concrete tests	1966	14-7-252-412		
2	File "Stewartville G.S. Vol 2"	Genl	Memos, correspondence, reports, tests results, drawings, minutes of meetings on - cement and concrete tests - installation of waterstop - repair of deck - testing on concrete cores	12/66-07/69	14-7-252-408		
3	"Specification L503-66 for Concrete Placing and Workmanship"	Spec	Specification L-503-66	08/66	14-7-252-412		

APPENDIX E

Calabogie GS

The following item numbers and headings refer to the table "Format of Technical Histories" located in the Civil Works Department document "Terms of Reference for the Civil Research Department".

		Page No
Item 3.8	Inspection Testing and Investigation Reports	101
Calabogie GS - Remedial Work		
Item 2.4	Construction Plans and Specifications	102
Item 2.5	Correspondence Files	104

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 3.8 - INSPECTION TESTING AND INVESTIGATION REPORTS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Calabogie G.S.

RIVER SYSTEM: Madawaska

PERIOD: 1930-1968

PREPARED BY: E.J. McColm

REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	Field Note Book - Central and Ottawa Systems Book #1	Insp	Field notes from inspection trips in 1930 and 1932	06/30-10/32			HIST*
2	Condition of Concrete Calabogie G.S.	Rept	Inspection of dam	31/03/52		52-288	
3	Soniscope Measurements Calabogie G.S.	Rept	Soniscope measurements	03/01/66	14-7-265-1082	66-1-H	
4	Concrete Repairs at Calabogie G.S.	Rept	Concrete repairs	25/09/68		68-371-H	

*Work file for internal use of Concrete Technology Section

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DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATION
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Calabogie G.S. (Remedial Work)

RIVER SYSTEM: Madawaska

PERIOD: 1965-1969

PREPARED BY: E.J. McColm

REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	Concrete Inspectors Daily Concrete Reports By Pour Number CL-MD-1 - CL-MD-35 CL-SA-1 - CL-SA-22 CL-FR-1 - CL-FR-14	Insp	Concrete inspector daily reports by location -main dam (MD) -sluice area (SA) -forbay rehabilitation (FR) (file includes other miscellaneous reports)	04/68-11/68	14-7-267-1163		
	Concrete Test Results		Concrete test results				
2	7-Day Strength	Data	7-Day cylinder tests	06/65-02/69	14-7-255-552		
3	28-Day Strength	Data	28-Day cylinder tests	08/65-01/69	14-7-255-553		
4	49-Day Strength	Data	49-Day cylinder tests	12/66-12/68	14-7-255-555		
5	90-Day Strength	Data	90-Day cylinder tests	07/65-06/67	14-7-255-554		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATION
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Calabogie G.S. (Remedial Work)

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
6	Madawaska River Projects Concrete Tests	Data	Miscellaneous concrete test results	08/68-06/69	14-7-257-627		
7	Madawaska River Projects Monthly Progress Report	Rept	Monthly progress reports for 05/66 - 07/69	05/66-07/69	14-7-257-626		
8	Calabogie G.S. - General	Data	One Concrete test report on 1 5/8" diameter concrete core from main dam	03/68			L 82.1.1*
9	Lab File "Cement - Chemical Analysis"	Data	Results of chemical analysis on cement	1965-1969			L 452.2.2*
10	Cement C.L. Cards	Data	Results of tests on cement	1965-1969			Conc. Lab*

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Calabogie G.S. (Remedial Work)
RIVER SYSTEM: Madawaska
PERIOD: 1937-1968

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	File "Calabogie G.S. Masonry Research"	Genl	Handwritten notes, drawings sketchs, reports, memos on - calabogie rehabilitation - concrete tests on 1 5/8" and 6" concrete cores from main dam - soniscope test (1950) - concrete patching	1937-1968	14-7-267-1164		
2	File "Stewartville G.S. - Vol 2"	Genl	General information on concrete cores taken from main dam	03/67	14-7-252-408		

APPENDIX F

Barrett Chute GS

The following item numbers and headings refer to the table "Format of Technical Histories" located in the Civil Works Department document "Terms of Reference for the Civil Research Department".

		Page No
Item 2.3	Design Assumptions and Criteria	106
Item 2.4	Construction Plans and Specifications	107
Item 2.5	Correspondence Files	109
Item 3.8	Inspection Testing and Investigation Reports	111
Barrett Chute GS - Extension		
Item 2.3	Design Assumptions and Criteria	114
Item 2.4	Construction Plans and Specifications	116
Item 2.5	Correspondence Files	119

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Barrett Chute G.S.

RIVER SYSTEM: Madawaska

PERIOD: 1941-1942

PREPARED BY: E.J. McColm

REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	File - Barrett Chute - Accelerated Concrete Investigation	Data	Accelerated concrete investigation - results of tests on different concrete mixes	01/41	14-7-265-1083		
2	"Barrett Chute - Accelerated Concrete Investigation - Calcium Chloride Used As An Accelerator"	Rept	Report on calcium chloride used as an accelerator in concrete	17/03/42	14-7-265-1089		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Barrett Chute G.S.

RIVER SYSTEM: Madawaska

PERIOD: 1940-1942

PREPARED BY: E.J. McColm

REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	Barrett Chute Development Report on Concrete 1941-1942	Rept	Comprehensive report dealing with most aspects of the job pertaining to concrete, including - photos - drawings marked with location of concrete defects and thermocouples - records of concrete tests	1942			HIST*
2	Barrett Chute - Photos	Phot	Photos of crack repair, diamond drilling of main dam, damaged concrete, construction and aggregate locations	1940-1945			HIST*
3	Barrett Chute- Concrete Reports	Insp	A few random concrete inspectors daily reports	05/42-11/42	14-7-265-1086		
4	Barrett Chute- Concrete Tests	Rept	Results of concrete tests	14/09/42	14-7-265-1088	L04529	

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Barrett Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
5	Age Strength Relations Barrett Chute Concrete	Data	Age - strength relations from results of concrete tests	25/10/46	14-7-265-1089		
6	Concrete Tests - Ratio of Strength	Data	Record of concrete tests 04/41-10/42, 04/66-10/68. The results of these tests were put in a table as a percentage of design strength	1941-42 1966-68	14-7-265-1087		
7	Sluice Closure In Concreting of Main Dam Diversion at Barrett Chute	Rept	Report of concreting operation of sluice closure	01/05/42	14-7-265-1090		
8	Lab File - "Cement Chemical Analysis"	Data	Results of chemical analysis on cement	1940-1942			L 452.2.1*
9	Cement C.L. Cards	Data	Results of tests on cement	1940-1942			Conc. Lab*

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Barrett Chute G.S.
RIVER SYSTEM: Madawaska
PERIOD: 1937-1942

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	File - Barrett Chute - General	Genl	Reports, notes, memos and photos on - aggregate locations and supply - long term concrete tests - concrete inspection trips (1945,1951) - installation of meters (second closure plug) - temperature history of interior of dam - deck slab investigation	1937-1971	14-7-265-1088		
2	File - Barrett Chute	Genl	Summary of results and drawings for aggregates survey	1940-1941	14-7-256-604		
3	Barrett Chute Aggregate Investigation	Memo	Memo on aggregate survey	11/40	14-7-253-430		
4	File - Barrett Chute Aggregates	Data	Results obtained from test pits for aggregate survey	02/41	14-7-265-1084		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Barrett Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
5	File - Barrett Chute - Masory Research	Genl	Notes and memos on dust control	1941-1951	14-7-265-1091		
6	Comparative Tests on Barrett Chute and Bark Lake Concrete Aggregate	Rept	Comparison of aggregate used at Bark Lake and Barrett Chute	05/42	14-7-265-1089		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 3.8 - INSPECTION TESTING AND INVESTIGATION REPORTS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Barrett Chute G.S.
RIVER SYSTEM: Madawaska
PERIOD: 1942-1952

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	Long Term Concrete Tests	Rept	Results of long term concrete tests for both the original construction and extension work.	14/06/83		S83-20-H	
2	"Measurements of Stress Strain and Temperatures Barrett Chute Dam - 87012 V99-554"	Rept	Stress, strain and temperature measurements in dam	16/06/42		LO2812-27	
3	Field Note Book - Central and Ottawa Book #2	Data	Field note book of R.B. Young	10/42			HIST*
4	"Durability of Concrete Made From Legree Gravel Barrett Chute Development"	Rept	Durability of concrete made with Legree gravel	01/12/42	14-7-265-1089 14-7-265-1091	LO 4529	
5	Photographs	Phot	Photographs of invesitgation trips and work in 1943, 45, 51	1943-1951	14-7-265-1089		

*Work file for internal use of Concrete Technology Section

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DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 3.8 - INSPECTION TESTING AND INVESTIGATION REPORTS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Barrett Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
6	"Measurement of Stress, Strain and Temperature, Barrett Chute Dam"	Rept	Stress, strain and temperature measurements in dam	29/12/44		LO 4814	
7	Lab File - "Barrett Chute"	Genl	Photos, sketchs, notes on - diamond drilling of main dam - age strength relations of concrete	1945			L 10.1*
8	Lab File- "Barrett Chute"	Genl	Drawing, sketchs and notes on - installation of thermocouples in head works	1945			L 3*
9	"Exploration of The Depth of Surface Cracks in the Main Dam at Barrett Chute"	Rept	Depth of surface cracks in the main dam	30/01/46	14-7-265-1092 14-7-265-1082	LO 40084	
10	"Study of Cracks In Barrett Chute Dam"	Rept	Study of cracks in main dam	08/09/47	14-7-265-1084	LO 2812-26	

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 3.8 - INSPECTION TESTING AND INVESTIGATION REPORTS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Barrett Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
11	"Observations of Prepakt Concrete Used on Structures for the Commission"	Rept	Observations of prepakt concrete used on structures	07/48			*Binder: 6-89
12	File - "Barrett Chute Aggregate"	Data	Test results from concrete cores taken from main dam	02/51	14-7-265-1084		
13	File - "Barrett Chute Masory Research"	Rept Memo	Draft copy of report "Tests on Barrett Chute Cores" Memo - "Cooling Test on Mass Concrete"	1951	14-7-265-1091		"
14	Barrett Chute Defects	Data	Handwritten notes from an inspection trip.	After 1951			HIST*
15	"Condition of Concrete-Barrett Chute"	Rept	Inspection of concrete.	10/11/52	14-7-265-1088 14-7-253-430	52-735	

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Barrett Chute G.S. - Extension

RIVER SYSTEM: Madawaska

PERIOD: 1965-1967

PREPARED BY: E.J. McColm

REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	Madawaska River Barrett Chute G.S. Proposed Plant Extension (Engineering Appraisal)	Rept	Engineering appraisal No. 128.68 for plant extension	04/65	14-7-265-1082		
2	"Crushed Gravel From the Jamieson Pit, Renfrew"	Rept	Jamieson Pit - crushed gravel	08/06/66	14-7-265-1082	S66-32-H	
3	"Sands From the Jamieson Pit, Renfrew"	Rept	Jamieson Pit - sand	27/06/66	14-7-265-1082	S66-34-H	
4	"Hydro Low Heat Cement - Hull Cement"	Rept	Low heat cement	22/09/66	14-7-265-1082	S66-53-H	
5	"Visit to Quarries and Pits in the Arnprior-Renfrew Area"	Rept	Visit to quarries and pits.	04/11/66		S66-61-H	
6	"Characteristics of Braeside (Lamieux) Limestone"	Rept	Braeside Limestone	08/11/66		S66-62-H	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Barrett Chute G.S. - Extension

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
7	"Special Low Heat Portland Cement - Canada Cement Company, Hull Mill"	Rept	Low heat cement	19/12/66	14-7-265-1082	SC66-67-H	
8	"Braeside Limestone Aggregate (Comparisons of Samples With High and Low Sulphate Losses)"	Rept	Braeside limestone - comparison of samples with high and low sulphate losses	15/03/67		S67-11-H	
9	Potential Alkali Reactivity of Cement Aggregate Combinations - Barrett Chute And Stewartville G.S."	Rept	Potential alkali reactivity of cement/aggregate combinations	21/07/67	14-7-265-1088	SE67-59-H	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Barrett Chute G.S. - Extension
RIVER SYSTEM: Madawaska
PERIOD: 1965-1969

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	Barrett Chute- Concrete Inspectors Daily Report	Insp	Concrete inspectors daily reports for all areas including - Powerhouse BC-PH-1 - BC-PH-130 - Pen Stock BC-P-1 - BC-P-70	07/66-10/69	14-7-265-1085		
	Concrete Test Results		Results of tests on concrete cylinders				
2	7 Day Strength	Data	7-day cylinder test	06/65-02/69	14-7-255-552		
3	28 Day Strength	Data	28-day cylinder test	08/65-01/69	14-7-255-553		
4	49 Day Strength	Data	49-day cylinder test	12/66-12/68	14-7-255-555		
5	90 Day Strength	Data	90-day cylinder test	07/65-06/67	14-7-255-554		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Barrett Chute G.S. - Extension

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
6	File - "Mountain Chute G.S. - General Vol 9"	Data	Concrete test results	1967	14-7-256-586		
7	Madawaska River Projects Concrete Tests	Data	Concrete test results	08/68-06/69	14-7-257-627		
8	Mountain Chute Correspondence and Job Mixes	Data	Graphs of concrete test for unit 4 headworks roof	03/66-05/69	14-7-256-579		
9	Lab File- Barrett Chute and Stewartville Extensions Cement & Fly Ash	Insp Data	Cement and fly ash test reports	10/66-04/69			L 10.4.1*
10	"Specification L 503-66 For Concrete Placing And Workmanship"	Spec	Specification for concrete placing and workmanship	08/66	14-7-252-412 14-7-265-1082		
11	Weekly Progress Reports Madawaska River Project	Rept	Weekly progress report for period 13/04/66 - 18/05/66	04/66-05/66	14-7-255-575		
12	Madawaska River Project - Monthly Progress Report	Rept	Monthly progress reports for period 05/66 - 07/69	05/66-07/69	14-7-257-626		

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Barrett Chute G.S. - Extension

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
13	File - "Mountain Chute General"	Genl	Minutes of project meetings	09/66-12/66	14-7-256-585		
14	Lab File - "Cement Chemical Analysis"	Data	Results of chemical analysis of cement	1965-1969			L 452.2.2*
15	Cement C.L. Cards	Data	Results of tests on cement	1965-1969			Conc. Lab*

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Barrett Chute G.S. - Extension
RIVER SYSTEM: Madawaska
PERIOD: 1966-1969

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	File - "Barrett Chute"	Genl	Memos, notes, correspondence, minutes of meetings - supply of concrete aggregates - aggregate test results and survey	1966	14-7-265-1082		
2	File - "Stewartville GS Genral Vol 1"	Genl	Reports and notes on - concrete aggregate tests - cement tests	1966	14-7-252-412		
3	File- "Stewartville GS Vol 2"	Genl	General information on the extension work	12/66-07/69	14-7-252-408		
4	Lab File - "Barrett Chute and Stewartville Expansion - General"	Genl	Test results, memos, reports and notes on - concrete tests - aggregate tests - low heat cement - air entraining	05/66-01/69			L 10.2.1*

*Work file for internal use of Concrete Technology Section

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APPENDIX G

Mountain Chute GS

The following item numbers and headings refer to the table "Format of Technical Histories" located in the Civil Works Department document "Terms of Reference for the Civil Research Department".

		Page No
Item 2.3	Design Assumptions and Criteria	121
Item 2.4	Construction Plans and Specifications	130
Item 2.5	Correspondence Files	140
Item 3.8	Inspection Testing and Investigation Reports	146

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

PERIOD: 1964-1966

PREPARED BY: E.J. McColm

REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	"Progress Report on Electrical Resistivity Survey for Sand and Gravel Deposits in the Black Donald Area, Mountain Chute Development"	Rept	Electrical resistivity survey for aggregate - Black Donald area	26/08/47	14-7-255-562	LO 1492	"
2	"Madawaska River Mountain Chute G.S. (Engineering Appraisal)"	Rept	Engineering appraisal of Mountain Chute G.S.	06/64	14-7-255-561		
3	"Characteristics of Mountain Chute Gravel (P-1222)"	Rept	Aggregate study Mountain Chute gravel	28/08/64	14-7-255-577	M64-40	
4	"Petrographic Characteristics of Mountain Chute Sand (P-1223)"	Rept	Petrographical examination - Mountain Chute Sand	09/09/64	14-7-255-577	M64-42	
5	"Petrographic Characteristics of Mountain Chute Sand and Gravel (S-5808)"	Rept	Petrographic examination - Mountain Chute sand and gravel	19/10/64	14-7-256-579	M64-45	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
6	"Mass Concreting Practices"	Rept	Mass concreting practices	02/11/64	14-7-256-580	M64-49	
7	"Visit to Mountain Chute G.S. (Selection of Concrete Aggregates)"	Rept	Aggregate selection	03/12/64	14-7-256-580	M64-53	
8	"Preliminary Report on Mountain Chute Rock From a New Quarry Area"	Rept	Report on rock from a new quarry area	11/12/64	14-7-256-580	M64-55	
9	"Characteristics of Marble as Concrete Aggregate"	Rept	Characteristics of marble as concrete aggregate	16/12/64	14-7-256-580	M64-57	
10	"Petrographic Characteristics of Marble Drill Cores From Mountain Chute G.S."	Rept	Petrographic examination - marble drill cores	05/01/65	14-7-256-578	65-4	
11	"Preliminary Report on Pink Gneiss from Mountain Chute"	Rept	Report on pink gneiss	19/01/65	14-7-256-578	65-3	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
12	"Suitability of PVC 9" Flat-Ribbed Waterstop For a Hydraulic Head of 170 Feet"	Rept	PVC waterstop for a hydraulic heat of 170'	22/01/65		65-42	
13	"False Set in Cement and Specification Requirements"	Rept	False set in cement	10/02/65	14-7-256-578	65-51	
14	"Comparison of Two Marble Samples from Mountain Chute"	Rept	Comparison of two marble samples	16/02/65	14-7-256-578	M65-8	
15	"Characteristics of Concrete Prism Made of Dolomitic Marble Coarse Aggregate After Freeze-Thaw Test"	Rept	Freeze/thaw test using dolomite marble as coarse aggregate	23/02/65	14-7-256-578	M65-10	
16	"Rocks From the Black Donald Church Quarry Site (Location No. 3)"	Rept	Examination of rocks from the Black Donald Church Quarry Site	26/02/65	14-7-256-578	M65-12	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
17	"Four Drill Cores From Quarry Site No. 2 at Mountain Chute"	Rept	Drill cores from quarry site No. 2	04/03/65	14-7-256-578	M65-13	
18	"Detailed Petrographic Logs of Four Drill Cores from Quarry Site No. 2 at Mountain Chute"	Rept	Petrographic logs of drill cores from quarry site No. 2	05/03/65	14-7-256-578	M65-13A	
19	"Pink Gniess from Quarry Site No. 1 Lots 16 and 17"	Rept	Pink gniess from quarry site No. 1 lots 16 and 17	12/03/65	14-7-256-578	M65-15	
20	"Whitish Pegmatite From Mountain Chute G.S. (P-1269, S-5825)"	Rept	Examination of whitish pegmatite.	15/03/65	14-7-256-578	M65-16	
21	"Two Marble Samples (S-5837, S-5840) from Mountain Chute"	Rept	Examination of two marble samples	25/03/65	14-7-256-578	M65-18	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
22	"Characteristics of Nine Drill Cores From Mountain Chute Quarry Site 1A"	Rept	Examination of nine drill cores from quarry site 1A	05/04/65	14-7-256-578	M65-20	
23	"Evaluation of Water Reducing Admixtures for Concrete Mountain G.S."	Rept	Evaluation of water reducing admixtures	15/04/65	14-7-256-581	MM65-5	
24	"Crushed Gneissic Rocks from Mountain Chute Location 2"	Rept	Examination of crushed gneissic rocks	14/04/65	14-7-256-578	M65-22	
25	"Petrographic Characteristics of Mountain Chute Gravel P-1258, S-5815"	Rept	Petrographic examination - gravel	23/04/65	14-7-256-581	M65-23	
26	"Calcitic Marble Sample From Powerhouse Excavations - Mountain Chute G.S."	Rept	Examination of calcitic marble sample from powerhouse excavations	26/04/65	14-7-256-581	M65-24	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
27	"Characteristics of Two Additional Drill Cores From Mountain Chute Quarry Site 1A"	Rept	Drill cores from quarry site 1A	04/05/65	14-7-256-581	M65-27	
28	"Characteristics of Concrete Prisms With Calcitic Marble Aggregate After Freeze/Thaw Tests"	Rept	Freeze/thaw tests using calcitic marble as aggregate	17/05/65	14-7-256-581	M65-32	
29	"Evaluation of Crusher Dust as a Concrete Fine Aggregate Mountain Chute G.S."	Rept	Evaluation of crusher dust as a fine aggregate	19/05/65	14-7-256-581	M65-31	
30	"Void Characteristics of Concrete Using Various Admixtures"	Rept	Void characteristics of concrete using various admixtures	21/05/65	14-7-256-581	M65-33	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
31	"Calcitic Marble From "Waste Rock Area" Quarry 1A, Mountain Chute G.S."	Rept	Calcitic marble from "Waste Rock Area" quarry 1A	25/05/65	14-7-256-581	M65-34	
32	"Characteristics of Additional Drill Cores from Mountain Chute Quarry 1A"	Rept	Drill cores from quarry 1A	02/06/65	14-7-256-581	M65-35	
33	"Detailed Petrographic Logs of Ten Drill Cores from Quarry 1A at Mountain Chute (Addendum)"	Rept	Petrographical logs of ten drill cores from quarry 1A	24/06/65	14-7-256-581	M65-35A	
34	"Composition of Rocks from Quarry Site No. 6 (Drill Cores 1 to 3)"	Rept	Quarry site No. 6 - composition of rocks	09/06/65	14-7-256-581	M65-36	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
35	"Crushed Marble Sample (P-1330, S-5883) from Powerhouse Foundations, Mountain Chute G.S."	Rept	Powerhouse foundation - crushed marble sample	09/06/65	14-7-256-581	M65-38	
36	"Rock Characteristics of Bulk Samples (P-1338 S-5892) from Quarry Site No. 6"	Rept	Quarry site No. 6 - characteristics of rock	16/06/65	14-7-256-581	M65-40	
37	"Blasting Criteria for Mountain Chute G.S."	Rept	Blasting criteria	23/07/65	14-7-256-581	65-275	
38	"Composition of Sample From Main North Gravity Dam Excavations, Mountain Chute"	Rept	North gravity dam - composition of sample from excavation	27/07/65	14-7-256-581	M65-43	
39	"Marble Concrete From Black Donald Powerhouse Mountain Chute"	Rept	Marble concrete samples from the Black Donald powerhouse	12/10/65	14-7-256-582	M65-52	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
40	"Cement Inspection - Mountain Chute G.S. Lake Ontario Cement Company - Picton Mill"	Rept	Cement inspection	10/03/66	14-7-256-583	66-82-H	
41	"Mountain Chute G.S. Freezing and Thawing On Rock Proposed for Use as RipRap"	Rept	RipRap - freeze/thaw test on rock	07/06/66	14-7-256-583	S66-31-H	"
42	"Tension Tests on Grouted and Bonded Waterstop Materials"	Rept	Tension tests on grouted and bonded waterstop material	04/07/66	14-7-256-584	SP66-7-H	
43	"Mountain Chute Rocks Proposed for Use as RipRap"	Rept	RipRap - proposed rocks	13/07/66	14-7-256-584	66-247-H	
44	"Time of Setting of Mortar Mixtures by Penetration Resistance Using Normal and Type IV Portland Cement"	Rept	Penetration resistance used to test setting time of mortar using different cements	18/08/66	14-7-256-585	SM66-3-H	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.
RIVER SYSTEM: Madawaska
PERIOD: 1964-1969

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
	Concrete Inspectors Daily Reports by Pour Number		Daily concrete reports by area				
1	MD-1 - MD-148	Insp	Main dam	05/65-11/65	14-7-255-556		
2	MD-150 - MD-252	Insp	Main dam	11/65-07/66	14-7-255-566		
3	MD-253 - MD-326	Insp	Main dam	08/66-09/67	14-7-255-567		
4	PH-1 - PH-114	Insp	Powerhouse substructure	11/65-03/67	14-7-255-570		
5	PH-115 - PH-163	Insp	Powerhouse substructure	04/67-11/67	14-7-255-571		
6	HW-1 - HW-124	Insp	Head works	09/65-04/67	14-7-255-564		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
7	HW-125 - HW-156	Insp	Head works	04/67-11/67	14-7-255-563		
8	SL-1 - SL-71	Insp	Sluice piers	05/66-04/68	14-7-255-572		
9	TA-1 - TA-7 TR-1 - TR-7	Insp	Turning area and Transformer area	10/66-10/67	14-7-255-573		
10	MIP-1 - MIP-43	Insp	Misc - permanent	07/65-06/67	14-7-255-568		
11	MIT-1 - MIT-11	Insp	Misc - temporary	08/65-06/67	14-7-255-569		
12	MB-1 - MB-33	Insp	Madawaska River bridge	10/65-05/67	14-7-255-565		
	Concrete tests		Concrete cylinder test results				
13	7 Day Strength	Data	7 day cylinder test	06/65-02/69	14-7-255-552		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
	Concrete Tests		Concrete cylinder test results				
14	28 Day Strength	Data	28 day cylinder test	08/65-01/69	14-7-255-553		
15	49 Day Strength	Data	49 day cylinder test	12/66-12/68	14-7-255-555		
16	90 Day Strength	Data	90 day cylinder test	07/65-06/67	14-7-255-554		
17	Concrete Test - Main Dam	Data	Concrete tests on cylinders from the powerhouse	06/65-10/67	14-7-255-558		
18	Conc Test - Madawaska River Bridge	Data	Concrete test on cylinders from Madawaska River bridge	10/65-05/67	14-7-255-559		
19	Concrete Test - Mixing Plant	Data	Concrete test reports for pours at the mixing plant	03/65-05/65	14-7-255-560		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
20	File	Drwg	Various drawings identifying the location of pours on the structures, by pour No. and concrete schedules	1965-66	14-7-256-605		
21	Supply of Fly Ash to Mountain Chute G.S.	Rept Data	Fly ash supply and testing	10/02/67	14-7-256-586	S67-8-H	
22	Diamond Drill Hole Logs Quarry Site #1	Insp	Bore hole logs for holes drilled at quarry site #1	12/64-05/65	14-7-256-603		
23	Weekly Prog Reports - Mountain Chute G.S. Weekly Prog Reports - Madawaska River Projects	Rept	Period 09/09/64 - 26/05/65 (handwritten memos) Period 02/06/65 - 23/03/66 Period 13/04/66 - 18/05/66	09/64-05/66	14-7-255-575		
24	Mountain Chute G.S. Monthly Prog Report Monthly Prog Report Madawaska River Project	Rept	Period 06/65 - 04/66 Period 05/66 - 07/69	06/65-07/69 05/66-07/69	14-7-257-626		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
25	"Soniscope Tests - Mountain Chute G.S."	Rept	Soniscope test on main dam	21/12/65	14-7-256-582	65-494	
26	"oniscope Test - Mountain Chute G.S. - Report No. 2"	Rept	Soniscope test on main dam	16/03/66	14-7-256-583	66-94-H	
27	Conc Cores - Water Tests - Block #1	Insp	Logs from the drilling of block N-1 and water test results	01/66	14-7-256-594		
28	Conc Cores - Water Tests - Block #2	Insp	Logs from the drilling of block S-2 and water test results	11/65-12/65	14-7-256-595		
29	Conc Cores - Water Tests - Block #4	Insp	Logs from the drilling of block S-4 and water test results	11/65-12/65	14-7-256-597		
30	Conc Cores - Water Tests - Block #5	Insp	Logs from the drilling of block S-5 and water test results	11/65-12/65	14-7-256-596		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
31	Drill Holes and Water Tests - Block S-6	Insp Genl	Logs for drilling of blocks S-6 and water test results - drawing of location of drill holes for various blocks - summary of results of conc strength tests for various blocks	09/65-02/66	14-7-256-589		
32	Drill Holes and Water Test - Block S-10	Insp	Logs from the drilling of block S-10 and results of water tests - drawings of block S-6 and S-10 showing drill holes	09/65-02/66	14-7-256-588		
33	Drill Holes and Water Tests - Block S-12	Insp	Logs from the drilling of blocks S-12 and results of water test - drawing showing location of drill holes	09/65-02/66	14-7-255-574		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
34	Conc Cores - Water Tests - Block 13	Insp	Logs from the drilling of blocks 13 and water test results	10/65-11/65	14-7-256-593		
35	Drill Holes and Water Tests - Block S-16	Insp	Logs from the drilling of block S-16 - drawings of block and location of drill holes for blocks S-12, S-16	11/65-02/66	14-7-256-587		
36	Conc Testing Blocks 2-16 - Maps & Plans	Drwg	Various drawings showing the location of drill holes for water tests in the different blocks	09/65-12/65	14-7-256-591		
37	Washing of Holes Length Dip, Block 2-16	Insp	Inspectors Records - Dip Test	11/65-12/65	14-7-256-592		
38	Grouting (Remedial) Blocks 2-16	Insp	Inspectors Records - Grouting of Blocks	01/66-02/66	14-7-256-590		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
39	File - Mountain Chute G.S. - Drilling and Grouting Concrete	Genl	Drawings, reports, memos, tests results, progress reports, minutes of meetings for - remedial work on block S-6 - water test, soniscope investigation and diamond drilling of block S-6 "Soniscope tests Mountain Chute G.S. (draft copy)"	08/65-01/66 13/12/65	14-7-256-600		
40	Mountain Chute G.S. Soniscope Survey	Genl	Drawings and sketchs showing blocks and drill holes memos, graphs, notes, draft report and data on soniscope survey	1965	14-7-256-599		
41	"Requirements for Embedment of Construction Piping in Gravity Section"	Memo	Memo on embedment of construction piping in gravity section	26/04/65	14-7-255-560		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
42	"Main Dam Foundations and Concreting"	Memo	Memo on main dam foundation and concreting	03/05/65	14-7-255-560		
43	"Mountain Chute G.S. Project Work Study Report of Clean-Up and Preparation Prior to Concrete Placing"	Rept	Work study on the clean-up and preparation prior to concrete placing	15/11/65	14-7-256-601		
44	"Mountain Chute G.S. Project Work Study Report Low Lift Concrete Placing Operation"	Rept	Work study on low lift concrete placing	13/06/66	14-7-256-585		
45	"Mountain Chute G.S. Concrete Vibrator Comparison Test"	Rept	Work study on concrete vibrator comparison test	02/09/66	14-7-256-585 14-7-256-602 14-7-255-557		
46	Mountain Chute Generating Station - Specification No. L-336-64 for Concreting	Spec	Specification for concreting	12/64	14-7-255-557		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
47	Mountain Chute Generating Station - Design Manual	Spec	Station design manual	1969	14-7-255-557		
48	Lab File "Cement - Chemical Analysis"	Data	Results of chemical analysis on cement	1964-1969			L 452.2.2*
49	Cement C.L. Cards	Data	Results of tests on cement	1964-1969			Conc. Lab*

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.
RIVER SYSTEM: Madawaska
PERIOD: 1964-1969

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	File "Mountain Chute G.S. General Vol 1"	Genl	Memos, correspondence, notes, reports, drill hole logs, drawings on - aggregate survey - mixing plant - concrete test (low strength)	06/64-11/64	14-7-255-577		
2	File "Mountain Chute G.S. General Vol 2"	Genl	Memos, correspondence, notes, reports, test results, on - concrete aggregate and - aggregate survey	10/64-12/64	14-7-256-580		
3	File "Mountain Chute G.S. General Vol 3"	Genl	Memos, correspondence, notes, reports, test results, minutes of meetings on - aggregate survey - concrete admixtures - fly ash - concrete tests	12/64-04/65	14-7-256-578		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
4	File "Mountain Chute G.S. General Vol 4"	Genl	Memos, correspondence, reports, test results, minutes of meetings on - concrete placing problems - poor concrete - 6" concrete cores - change in mix design - thermocouple results - concrete test cylinders and strength results - admixtures	04/65-12/65	14-7-256-581		
5	File "Mountain Chute G.S. General Vol 5"	Genl	Memos, correspondence, reports, test results and minutes of meetings on - 6" cores from main dam - concrete placing and repair - summary of aggregate survey - progress reports - cement tests	08/65-12/65	14-7-256-582		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
6	File "Mountain Chute G.S. General Vol 6"	Genl	Memos, correspondence, reports, test results, notes, minutes of meetings on - concrete repair and remedial work (grouting) - 6" concrete cores from main dam - construction and concrete schedules - concrete test results (statistical study) - construction joints - pour ID chart (draft tube sluice and training walls)	01/66-06/66	14-7-256-583		
7	File "Mountain Chute G.S. General Vol 7"	Genl	Memos, correspondence notes reports, test results, minutes of meetings on - fly ash and cement tests - concrete cores (bond effects) drill hole logs	01/66-07/66	14-7-256-584		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
8	File "Mountain Chute G.S. General Vol 8"	Genl	Memos, correspondence, notes, reports, test results, minutes of meetings on - fly ash and cement tests - concrete schedules - pour ID (main dam and head works, transformer pad) - strength tests on various concrete mixes - stay ring embedment and grouting - thermocouple readings (main dam)	09/66-12/66	14-7-256-585		
9	File "Mountain Chute G.S. General Vol 9"	Genl	Memos, correspondence, notes, reports, drawings on - headworks transition - concrete test results - ready mix concrete - concrete repairs - aggregate and cement test	01/67-10/67	14-7-256-586		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
10	File "Mountain Chute G.S. - Instuctions and Memos"	Genl	Memos, notes, correspondence on - aggregate survey and testing - concrete problems - diamond drill investigation for aggregate	11/64-11/65	14-7-255-576		
11	File "Mountain Chute - Correspondence and Job Mixes"	Genl	Memos, correspondence, notes, sketchs on - various concrete mix designs - thermocouple readings - aggregate survey - concrete core drill logs	03/66-05/69	14-7-256-579		
12	Mountain Chute G.S. - Drill Logs Aggregate Survey	Insp	Bore hole logs and location of sites for aggregate survey	02/65-05/65	14-7-256-598		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
13	Lab File "Mountain Chute G.S. Masonry Lab Tests"	Genl	Memos, correspondence - handwritten notes, test results on - concrete cores taken from dam - aggregate studies	09/64-05/66			L 75.1.1* "
14	Lab File "Mountain Chute G.S. Masonry Lab Tests"	Genl	Field notes, memos, test result, handwritten notes, reports on - tests performed on concrete materials and aggregate	03/66-08/67			L 75.1.2*
15	Mountain Chute Development 1947	Drwg	Drawings of area for aggregate survey. Concrete pour identification for (P.H. Erection Bay)	1947-1966	14-7-255-562		

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 3.8 - INSPECTION TESTING AND INVESTIGATION REPORTS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Mountain Chute G.S.

RIVER SYSTEM: Madawaska

PERIOD:

PREPARED BY: E.J. McColm

REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	Long Term Concrete Tests	Rept	Results of long term concrete tests	14/06/83		S83-20-H	

APPENDIX H

Kamaniskeg Lake Dam

The following item numbers and headings refer to the table "Format of Technical Histories" located in the Civil Works Department document "Terms of Reference for the Civil Research Department".

		Page No
Item 2.3	Design Assumptions and Criteria	148
Item 2.4	Construction Plans and Specifications	149
Item 2.5	Correspondence Files	150

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Kamaniskeg Lake Dam
RIVER SYSTEM: Madawaska
PERIOD: 1956

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	"Kamaniskeg Dam - Concrete Aggregate Survey"	Rept	Aggregate survey	27/06/56	14-7-262-872	56-307	
2	"Petrographical Examination of Paugh Lake Gravel"	Rept	Petrographic examination - Paugh Lake gravel	25/09/56	14-7-262-872	M56-96	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Kamaniskeg Lake Dam
RIVER SYSTEM: Madawaska River
PERIOD: 1956-1957

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	Kamaniskeg Lake Dam - Concrete Reports	Data	Concrete test results	08/56-02/57	14-7-262-874		
2	Analysis Summary - Kamaniskeg Lake Dam	Data	Summary of tests on aggregate	08/56-02/57	14-7-262-873		
3	"Results of Concrete Test Hammer on Concrete With Low Compressive Strength - Kamaniskeg Lake Dam"	Memo	File report on tests on low strength concrete using a concrete test hammer	21/01/57	14-7-262-872		
4	Lab File "Cement Chemical Analysis	Data	Results of chemical analysis on cement	1956-1957			L 452.2.1*
5	Cement C.L. Cards	Data	Results of tests on cement	1956-1957			Conc. Lab*

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Kamaniskeg Lake Dam
RIVER SYSTEM: Madawaska
PERIOD: 1956-1957

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	Kamaniskeg Lake Dam	Genl	Memos, correspondence, notes, sketchs and test reports on - concrete aggregate survey - concrete control and proportioning	06/56-02/57	14-7-262-872		

APPENDIX I

Bark Lake Dam

The following item numbers and headings refer to the table "Format of Technical Histories" located in the Civil Works Department document "Terms of Reference for the Civil Research Department".

		Page No
Item 2.3	Design Assumptions and Criteria	152
Item 2.4	Construction Plans and Specifications	153
Item 2.5	Correspondence Files	154
Item 3.8	Inspection Testing and Investigation Reports	155

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.3 - DESIGN ASSUMPTIONS AND CRITERIA
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Bark Lake Storage Dam

RIVER SYSTEM: Madawaska

PERIOD: 1942

PREPARED BY: E.J. McColm

REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	Bark Lake Dam- Concrete Studies	Rept	Various tests on concrete	15/09/42	14-7-265-1081	LO 4533	

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.4 - CONSTRUCTION PLANS AND SPECIFICATIONS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Bark Lake Storage Dam
RIVER SYSTEM: Madawaska
PERIOD: 1941-1942

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	Bark Lake Storage Dam-Job History	Rept	Comprehensive report dealing with most aspects of the job pertaining to concrete, includes - photos - work schedules - crack locations - concrete and aggregate test results	06/42			HIST* "
2	Lab File - "Bark Lake Dam"	Data	Test results, reports and notes on - concrete tests - concreting methods - aggregate	1941			L-1*
3	Cement C.L. Cards	Data	Results of tests on cement	1941-1942			Conc. Lab*

*Work file for internal use of Concrete Technology Section

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 2.5 - CORRESPONDENCE FILES
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Bark Lake Storage Dam
RIVER SYSTEM: Madawaska
PERIOD: 1941-1942

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	File "Bark Lake Dam - Concrete and Misc. Reports"	Genl	Memos, correspondence, notes, test results on - aggregate survey and tests - concrete inspection - draft copy of reports - cement tests	1941-1942	14-7-265-1081		

DAM SAFETY TECHNICAL HISTORY-BIBLIOGRAPHY
ITEM 3.8 - INSPECTION TESTING AND INVESTIGATION REPORTS
(CIVIL RESEARCH - CONCRETE TECHNOLOGY)

STRUCTURE: Bark Lake Storage Dam
RIVER SYSTEM: Madawaska
PERIOD: 1942-1952

PREPARED BY: E.J. McColm
REVIEWED BY: P.K. Mukherjee

ITEM NO.	TITLE OF DOCUMENT	NATURE OF DOCUMENT		DATE	LOCATION		
		CODE	TEXT		ARCHIVES NO.	REPORT NO.	FILE NO.
1	Field Note Book - Central and Ottawa Systems Book #2	Insp	Field note book of R.B. Young used for inspection trips	10/42			HIST*
2	Concrete Conditions Bark Lake Dam	Rept	Inspection of dam	01/05/52		52-368	
3	Bark Lake Storage Dam	Rept	Handwritten report with photos (preliminary copy of inspection report)	08/51			HIST*

Work file for internal use of Concrete Technology Section